Centers of Excellence for Teacher Training: A Summit of the Americas Initiative

Assessment of Institutional Capacity and Educational Needs in Bolivia, Peru, and Ecuador

BEPS

Basic Education and Policy Support (BEPS) Activity

CREATIVE ASSOCIATES INTERNATIONAL # In collaboration with

CARE, THE GEORGE WASHINGTON UNIVERSITY, AND GROUNDWORK

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The opinions expressed in this document are those of the authors and not those of the
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PREFACE

The Basic Education and Policy Support Activity (BEPS), a five-year initiative sponsored by USAID's LAC/RSD-EHR division, is designed to improve the quality, effectiveness, and access to formal and nonformal basic education. As an indefinite quantity contract (IQC) type, BEPS operates through both core funds and USAID Mission buy-ins to provide both short- and long-term assistance to missions and regional bureaus.

BEPS focuses on several important program areas: basic education, educational policy analysis and reform, restorative and additive educational work in countries in crisis (presence and non-presence), and the alleviation of abusive child labor. Services to be provided include policy appraisals and assessments, training and institutional strengthening, and the design and implementation of pilot projects, feasibility studies, applied research studies, seminars/workshops, and evaluations. Under BEPS, USAID also will compile and disseminate results, lessons learned, and other generalizable information through electronic networks, training workshops, national conferences, quarterly and annual reports, publications, and other vehicles.

One of the buy-ins for the BEPS activity is the Improved Human Resource Policies Task Order, a task order funded by LAC/RSD-EHR that provides technical assistance in basic education to USAID's Latin America and Caribbean (LAC) region. Helping to launch President George Bush's Centers of Excellence in Teacher Training initiative is one of the subtasks under that task order.

This assessment report was prepared as an input for USAID in the early conceptual, developmental stages of the Andean Centers of Excellence for Teacher Training. The recommendations contained in this report should neither be interpreted as conclusions, nor final decisions. The process of developing the CETT is dynamic; it evolves and changes as new information and inputs that become available are considered. Ongoing research and activities continue to inform the appropriate developmental focus and structure for each subregional Center of Excellence.

GLOSSARY

International Terms

AIESAD Asociación Iberoamericana de Educación Superior a

Distancia/Iberoamerican Association for Distance Higher

Education

ATEI Asociación de Televisión Educativa Iberoamericana/Iberoamerican

Association for Educational Television

BEPS Basic Education Policy Support
CAII Creative Associates International, Inc.

CAN Comunidad Andina de Naciones/Andean Community of Nations

CETT Center of Excellence for Teacher Training
CIDA Canadian International Development Agency

CPUR Centro de Promoción Urbano Rural/Center for Urban and Rural

Advancement

ICT Information and Communication Technologies

IDB Inter-American Development Bank

IIED International Institute for the Environment & Development ILCE Instituto Latinoamericano de la Comunicación Educativa/Latin

American Institute for Educational Communication

IQC Indefinite Quantity Contract

JICA Japanese International Communications Agency

GLOBATEL Distance Learning Network/GILAT GTZ German International Agency LASA Latin American Studies Association

MOE Ministry of Education

NGO Nongovernmental Organization
OAS Organization of American States
UNE National Teachers' Union

ONE Tradional reactions Official

USAID United States Agency for International Development

UNDP United Nations Development Programs

Bolivia

CEMSE Centro de Multiservicios Educativos/Center for Educational

Multiservices

CBIAE Centro Boliviano de Investigación y Acción Educativa/Bolivian

Center for Research and Educational Action

ENTEL National Telecommunications Company

FUNDETIC Business Foundation for Information Technology and

Communications

INS Instituto Normal Superior/Teacher Training Institute

PINS-EIB Program for National Institutes of Higher Learning in Intercultural

Bilingual Education

PRE Educational Reform Program/Programa de Reforma Educativa PREAL Partnership for Educational Revitalization in the Americas

Pro-EIB Programa de Formación en Educación Intercultural Bilingüe para

los Países Andinos/Program in Intercultural Bilingual Education

for the Andean Region

SIMECAL Nationwide Educational Quality System

UCB Universidad Católica Boliviana/Bolivian Catholic University UDABOL Universidad de Aquino Bolivia/Aquino University in Bolivia

UN Universidad Núr/Nur University

USFA Universidad San Francisco de Asis/San Francisco of Asis

University

Ecuador

DINAMEP National Directorate for Professional Improvement

DINEIB Dirección Nacional de Educación Intercultural Bilingüe/ National

Directoriate for Intercultural and Bilingual Education

FLOM Fundación Leonidas Ortega Moreira

IPED Institutos Pedagógicos/Pedagogical Institutes IPIB Intercultural and Bilingual Pedagogical Institutes

PUCE Pontificia Universidad Católica del Ecuador/ Pontifical Catholic

University of Ecuador

UASB Universidad Andina Simón Bolívar/ Andean University Simón

Bolívar

UTPL Universidad Particular Técnica de Loja/ Particular Technical

University of Loja

Peru

CIDE Consortium for Research and Educational Development
CIES Nuevos Conocimientos para la Actual Política Educativa/

Consortium for Educational Development Research

CONFIEP La Confederación Nacional de Instituciones Empresariales

Privadas/National Confederation of Peruvian Businessmen

CRECER Evaluation Program of the MOE

GRADE Grupo de Análisis para el Desarrollo/ Analysis Group for

Development

IPNM Instituto Pedagógico Nacional Monterrico/Monterrico National

Pedagogical Institute

ISP Instituto Superior Pedagógico/ Teacher Training Institute
MECEP Mejoramiento de la Educación Primaria/Program for Quality

Improvement of Peruvian Education

PIEDI Project for Educational Innovations in the District

of La Independencia

PLANCAD National Plan for Teacher Training

PPE Proyecto Principal de Educación para América Latina y el Caribe

/Principal Education Project for Latin America and the Caribbean

PRONOEI Nonformal Program for Preschool Education

PUCP Pontificia Universidad Católica del Perú/ Pontifical Catholic

University of Peru

SUTEP Sindicato Unico de Trabajadores en Educación del Perú/Teachers'

Union of Peru

TAREA Asociación de Publicaciones Educativas/Educational Publishing

Association

TELEDUSM University Television of Universidad Nacional Mayor de San

Marcos

UNMSM Universidad Nacional Mayor de San Marcos

UPCH Universidad Peruana Cayetano Heredia/ Peruvian University

Cayetano Heredia

USIL Universidad San Ignacio de Loyola

EXECUTIVE SUMMARY

This report is the result of an assessment conducted February 2-15, 2002 of institutional capacities to host, or participate in, the Center of Excellence in Teacher Training in three countries of the Andean region (Bolivia, Peru, and Ecuador). The principal purpose of the assessment was to identify potential institutions in the region with the capacity and interest to serve as a host or partner institution in the Andean CETT. The assessment focused secondarily on teacher training needs and capacities related to reading instruction in the three Andean countries to be served by this CETT. Through meetings with potential host institutions, USAID Missions, ministries of education (MOEs), teachers' unions, and other stakeholders, the assessment team endeavored to determine capacities to host, or partner, in establishing a Center of Excellence for Teacher Training in the region. Through discussions with these stakeholders, the assessment team also aimed to verify and augment the findings from prior desktop research on teacher training needs and country capacities in Bolivia, Peru, and Ecuador.

Institutional and Regional Capacities

Institutions that could host the Center of Excellence were identified out of the 29 that were visited in the three countries. Evaluation criteria for the 12 academic institutions examined closely focused on institutions' capacity to work regionally. These 12 institutions were reviewed and scored (see table in Chapter II). Four institutions were recommended for consideration as potential hosts of, or partners in, the Andean CETT. An explanation of the methodology used to select these institutions and summary profiles of each of the four institutions are included in the report.

The assessment team found that throughout the Andean region there is evidence that educators are committed to stabilizing the region by facilitating dialogue and interaction among its various cultural groups, especially between indigenous and non-indigenous groups. A central concept, interculturality, promotes valuing all cultures, while discouraging the tendency toward separatism or extreme nationalism. Universities, in particular, promote this idea by forming consortia representing a cross-section of cultural groups in response to sensitive regional issues such as human rights, indigenous law, environmental law, democracy and violence, and administration and management for indigenous mayors. Networking among universities is the preferred *modus operandi* and collaboration between the formal and nonformal education sectors is common. While competition exists among universities for student revenue, there is a belief among university officials that working together benefits institutions and students.

The Comunidad Andina de Naciones (CAN) actively promotes working partnerships that ensure regional coverage and promote integration and collaboration at all levels. Public-private partnerships are forged in response to social and economic development needs. Academic institutions form consortia in order to tap into the best and most-relevant resources to address education issues. Forming networks and working through consortia is referred to as "harmonization" and is a CAN strategy designed to standardize

education, integrate resources, and bring a level of peace, stability, and prosperity to the region.

As reflected in the report, there is considerable capacity in each country of the region, both within institutions and civil society, to support the work of a Center of Excellence.

Training and Related Educational Needs

The countries of the Andean region are especially sensitive to the importance of quality education programs that equip people with the skills to succeed in increasingly competitive markets. Leaders of the education community and civil society in Bolivia, Peru, and Ecuador are rightfully concerned about the weaknesses that often characterize their public-education programs. There remains strong interest in compelling and enduring reform to help ensure that future generations will be prepared for the rapidly shifting requirements of modernity and the attendant changes in the workplace.

Numerous educational reform programs have been implemented in recent years to enhance the quality of education in each of these three countries. In part due to political instability, too many problems of the past continue to persist in the present. Classrooms are often overcrowded, with multigrade, multi-age situations making the task of teaching reading very difficult. Teachers are ill equipped for reading instruction and sorely under trained in how to handle the additional burden of complex classroom situations. Materials, when available, are often underused as teachers do not receive training in new curriculum, nor do they benefit from follow-up support on new methodologies. Testing programs are inadequate to accurately measure student achievement or teacher performance. School days have been cut in length and number, and dropout rates are too high.

While the list of reasons that contribute to deficiencies in education programs is both varied and complex, perhaps none is as compelling as inadequacies in teacher quality. As this report indicates, both pre-service and in-service teachers and school administrators could benefit from additional training to strengthen classroom management skills and reading instruction methodologies.

The more traditional teacher training institutes for future teachers are being rapidly replaced by university teacher preparation programs. At the same time, indicators reveal a continuing disconnect between the rhetoric of university settings and the reality of classrooms. This gap is especially pressing in multigrade, often multilingual, schools in the more impoverished, rural areas of these three Andean countries.

There is no question that political stakeholders, as well as education leaders and businessmen, feel that there is a strong need to improve teacher training. Reading has been the weak link in a series of curriculum reforms and CETT appears to be a welcome intervention to help fill a need in the education system.

I. INTRODUCTION

A. Background

At the Summit of the Americas in Quebec City in April 2001, President George W. Bush drew attention to the fact that key educational indicators for Latin America and the Caribbean compare poorly with the rest of the world, with the lower socioeconomic groups being hardest hit by the deficiencies in the education systems. While acknowledging the complexities involved in determining the reasons for underachievement, President Bush highlighted inadequacies in teacher quality as a major contributing factor. President Bush further noted that most teachers and school administrators in the hemisphere have limited resources and that their training is inadequate in preparing them to deal with the special needs of disadvantaged students.

In response to this need to improve teacher quality, President Bush announced that his administration would support the creation of three Centers of Excellence for Teacher Training (CETT), to be housed in existing institutions in the Caribbean, Central America (including the Dominican Republic), and the Andean region of South America. These regional teacher training and resource centers would provide services to improve the quality of primary reading instruction in classrooms, including a focus on teachers and school directors in this effort. CETT commits also to a special emphasis on the poorest countries in each sub-region and teachers in disadvantaged communities. Training programs would be aimed at improving reading instruction and upgrading the knowledge and pedagogical skills of teachers, recognizing that many current teachers are poorly prepared and often unqualified. It is expected that about 15,000 teachers will benefit from this training over four years.

USAID will administer the resources and coordinate the program for these hemispheric Centers of Excellence, with guidance during the design phase from a consultative committee of U.S. and Latin American experts. The Department of Education, the Department of State, the Organization of American States (OAS), MOEs, business and citizen groups, faith-based organizations, international donors, and other hemispheric governments will be enlisted to form a partnership with USAID for program implementation.

Programs envisioned for the Centers of Excellence for Teacher Training are based on the following assumptions:

- Weak reading skills contribute significantly to scholastic underachievement.
- Teachers have limited skills to teach reading adequately, particularly to disadvantaged groups.
- Appropriate teacher training, that will facilitate improvements in decoding and reading comprehension skills, will help to create a more literate society, which, in turn, will fuel improved local economic development.

• A regional approach, utilizing the training-of-trainers (TOT) approach and ensuring appropriate supervisory support for that model, will be the most efficient and effective strategy for addressing poor teacher quality and deficiencies in the classroom teaching and learning environment.

Based on these assumptions, the Centers of Excellence for Teacher Training are expected to provide:

- A training-of-trainers program to improve teachers' and school administrators' skills, especially in reading instruction;
- A clearinghouse of teacher training materials; and
- An Internet portal linking teacher training institutions, think tanks, schools, teachers, and universities so that they can share materials, successful practices, and lessons learned, as well as provide virtual training.

B. Purpose of the Activity

In June 2001, USAID contracted Creative Associates International, Inc., through the Basic Education and Policy Support (BEPS) Activity (Contract HNE-I-00-00-00038-00, LAC/SD-EHR Task Order No. 04) to assist in laying the ground work for the Centers of Excellence in Teacher Training. The initial scope of work for the Caribbean and Central American countries was to assess regional teacher training needs and the potential capacity of institutions to serve as regional Centers of Excellence for Teacher Training (CETT).

Each assessment was undertaken to:

- Identify major teacher training needs that the Centers of Excellence could address:
- Identify institutions that could partner in implementing the Center of Excellence;
- Determine institutional needs to create a Center of Excellence; and
- Recommend alternative choices for a Center of Excellence based on assessment findings.

After the Caribbean and Central American assessments were completed, the Andean region was evaluated under a revised timeline and set of objectives. According to the scope of work for the Andean region, the goals of the initial assessment team were to assess, first, institutional capacity, and second, teacher training needs. The assessment team was asked primarily to identify and evaluate potential host institutions, with a follow-up assessment of teacher training needs to be conducted later. It was necessary to condense the assessment in order to identify a host institution and negotiate an agreement for the first anniversary of the Summit of the Americas in April 2002.

The stated goals of the initial Andean assessment were to:

- Assess the teacher training needs and capacities related to reading in the three
 Andean countries (Bolivia, Peru, and Ecuador) to be served by the Center of
 Excellence (through desktop research and field work); and
- Identify potential institutions in the region with the capacity and interest to serve as the host institution or partner institutions (e.g., in a consortium or providing assistance to the host institution) on the Andean CETT, and assess the capacity of the most promising institutions.

This report contains analysis of institutions that can form the central organizing, administrative, managerial, and academic unit and other institutions in the region can deliver services in each of the three countries to be served in the Andean region. It also provides an initial, cursory overview of teacher training needs and capacities in the subregion.

C. Research Methodology

Twenty-nine institutions in Bolivia, Peru, and Ecuador were visited. Twelve academic institutions out of this group were considered more closely regarding each one's capacity to host, or participate in, CETT. The four institutions discussed in this report were selected by the assessment team, made up of four field consultants. Upon completion of the field visits conducted February 4-15, 2002, findings and recommendations were complemented by additional feedback from USAID/LAC and BEPS staff. This report represents information gathered in the field, analysis of field data, and input from USAID and Washington D.C.-based BEPS staff.

Prior to visiting the three countries over a two-week period, the four researchers met with CAII/BEPS and USAID personnel in Washington, D.C. to develop specific research instruments and attendant questions (see Annex C for a list of interview questions). Throughout this week-long, preparatory meeting, the focus was on developing a uniform research framework, including goals, strategies, methods, and protocols.

USAID/Washington, the CETT Consultative Committee, and the Ministry of Education and USAID Mission staff in particular countries recommended universities and teacher-training institutions to be visited. Once in the field, researchers conducted interviews with university officials and attended conferences, such as in Peru, where educators and researchers convened. Initial meetings in each country were held with officials from the Ministry of Education and USAID Missions. In Bolivia, a team member met with the First Lady and both team members met with the U.S. Ambassador. Team members also met with key stakeholders, including nongovernmental organizations (NGOs), teachers' unions, and the private sector. Annex D contains a contact list from across the 29 institutions visited. A comprehensive list of institutions visited is provided in Chapter II, Institutional Profiles.

The field visits took place in February of 2002, during the Andean education system's vacation period. Therefore, it was only possible to visit with teachers, parents or other members of the education community in isolated cases. In Ecuador, the team was able to visit a migrant school for indigenous children. In Bolivia, a member of the team visited a university's laboratory school, where she was able to talk with parents about their children's progress. In Peru, another team member was able to visit informally with three teachers. These visits provided limited, but useful, insight into what is happening in the classroom currently.

Desktop research was conducted prior to the fieldwork to contextualize research findings in such areas as primary education, educational reform studies, literacy levels, percentage of federal funds spent on education in each country, and regional education trends in teacher training. Researchers in the field were asked to retrieve and send back available literature in the countries visited. As a result, a library of CD-ROMS, textbooks, university syllabi, brochures about universities and NGOs, and curriculum reports has been compiled at CAII offices in Washington, D.C.

Team members were requested to complete draft reports immediately after each country visit. Following the country visits, team members returned to Washington, D.C. to report findings, discuss information gathered, and reach consensus about institutions to recommend as host of CETT, country capacities, and priority teacher training needs.

As guidance in answering questions on institutional capacity, the team considered the following areas:

- Capacity for research and innovation
- Organization
- Teacher training programs offered
- Resources
- Populations served

A table is included in Chapter II to demonstrate the process of identifying institutions with potential for serving as lead institutions. The table assisted the team in quantifying the data gathered during the field visits.

D. Organization of Report

Chapter II provides a list of the 29 institutions visited, the criteria used for assessing the 12 academic institutions considered for participation in CETT, and a table quantifying the data gathered on those 12 institutions. Profiles are included of the four institutions that evidenced skills required for hosting, or participating in, the Andean CETT.

Chapter III offers design recommendations for the Andean CETT.

Chapter IV provides supporting data in an overview of the Andean region, including the socioeconomic situation faced by teachers, politicians, and the public and private sector. Sections on the educational climate and country/regional capacity are also included.

Chapter V details teacher training needs identified in the countries visited.

Chapter VI offers conclusions and next steps.

Finally, the report contains five annexes:

- A. Scope of Work
- B. Work Plan
- C. Research Questionnaires used in Country Visits
- D. List of Contacts
- E. Country Reports

II. INSTITUTIONAL PROFILES

A. Introduction

To help determine which organizations may be involved in the Andean Center of Excellence, the assessment team visited universities, normal schools, and NGOs in Bolivia, Peru, and Ecuador. These organizations were selected based on information provided by research team members, recommendations from the ministries of education and USAID Missions, and contacts in other development organizations. The following twenty-nine (29) institutions and organizations were included in the assessment of the Andean region during a two-week period in February 2002:

[· · · ·	T
Universities	Instituto Pedagógico Nacional Monterrico, Peru
(public and private)	Pontificia Universidad Católica del Ecuador, Ecuador
	Pontificia Universidad Católica del Perú, Peru
	 Universidad Andina Simón Bolívar, Ecuador
	 *Universidad Andina Simón Bolívar, Bolivia
	Universidad Católica Boliviana (La Paz), Bolivia
	Universidad de Aquino Bolivia
	Universidad Nacional Mayor de San Marcos, Peru
	*Universidad Núr, Bolivia
	Universidad Peruana Cayetano Heredia, Peru
	*Universidad Privada Boliviana, Bolivia
	Universidad San Francisco de Asis, Bolivia
	Universidad San Ignacio de Loyola, Peru
	 Universidad Técnica Particular de Loja, Ecuador
Educational Institutions:	Centro Boliviano de Investigación y Acción Educativa, Bolivia
• NGOs	Centro de Multiservicios Educativos, Bolivia
Non-profit institutions	Colegio Internacional del Sur, Bolivia
Normal schools	• *Fe y Alegría, Peru
	• *Fe y Alegría, Bolivia
	 Fundación Banco del Pichincha, Ecuador
	 Fundación Leonidas Ortega Moreira (FLOM), Ecuador
	FUNDETIC, Bolivia
	GRADE, Peru
	Peru 2021, Peru
	 Instituto Pedagógico Manuela Canizares, Ecuador
	Pro-EIB, Bolivia
	Project Concern, Bolivia
	TAREA, Peru

^{*} The assessment team conducted lengthy meetings with representatives from these institutions rather than making on-site visits.

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B. Assessment Criteria

A ratings table was used to quantify the data gathered on the capacity of each institution to host the Center of Excellence for Teacher Training in the Andean region. Criteria were weighted according to the relative importance of each category in leading CETT. For example, regional credibility was weighted 15 while partnering with the private sector was weighted five. Each institution could receive a rating from one to five in each category, five being the highest. This 1-5 rating was multiplied by the assigned weight of that category. There are, therefore, 500 points possible per institution on the ratings table.

C. Institutional Ratings

RATING: 1-5 (5 IS HIGHEST)	REGIONAL CREDIBILITY AND INFRA- STRUCTURE	ORGANIZATION, MANAGEMENT & FINANCIAL STABILITY	MODELS OF INNOVATION IN EDUCATION	EXPERIENCE WITH EDUCATION PROJECTS (esp. donor- assisted)	EXPERIENCE WITH EDUCATION RESEARCH	EXPERIENCE IN TEACHER TRAINING WITH TARGET GROUP (rural, disadvantaged, bilingual, reading)	ICT/ DISTANCE LEARNING	PARTNERSHIPS WITH PRIVATE SECTOR	PARTNER- SHIPS WITH PUBLIC SECTOR	COMMUNITY OUTREACH	TOTAL
Weight≻	15	15	10	10	10	15	10	5	5	5	100
Institutions ✓											
Universidad	5	5	5	5	4	4	5	4	5	5	
Peruana Cayetano Heredia,	75	75	50	50	40	60	50	20	25	25	
Peru											470
Universidad	5	5	3	5	5	4	5	4	4	4	
Católica, Peru	75	75	30	50	50	60	50	20	20	20	450
Universidad	5	5	5	5	5	3	3	4	5	5	
Andina Simón Bolívar,	75	75	50	50	50	45	30	20	25	25	
Ecuador											445
Universidad	3	5	5	5	3	5	5	4	4	4	
Núr, Bolivia	45	75	50	50	30	75	50	20	20	20	
											435

RATING: 1-5 (5 IS HIGHEST)	REGIONAL CREDIBILITY AND INFRA- STRUCTURE	ORGANIZATION, MANAGEMENT & FINANCIAL STABILITY	MODELS OF INNOVATION IN EDUCATION	EXPERIENCE WITH EDUCATION PROJECTS (esp. donor- assisted)	EXPERIENCE WITH EDUCATION RESEARCH	EXPERIENCE IN TEACHER TRAINING WITH TARGET GROUP (rural, disadvantaged, bilingual, reading)	ICT/ DISTANCE LEARNING	PARTNERSHIPS WITH PRIVATE SECTOR	PARTNER- SHIPS WITH PUBLIC SECTOR	COMMUNITY OUTREACH	TOTAL
Weight➤ Institutions ✓	15	15	10	10	10	15	10	5	5	5	100
Universidad	3	3	3	5	4	4	3	5	3	4	
Católica, Ecuador	45	45	30	50	40	60	30	25	15	20	
											360
Universidad	5	4	3	2	5	0	5	5	5	0	
de Loja, Ecuador	75	60	30	20	50	0	50	25	25	0	335
IPN	3	5	4	5	1	3	1	1	4	4	
Monterrico, Peru	45	75	40	50	10	45	10	5	20	20	320
Universidad Católica	3 45	5 75	2 20	3 30	2 20	4 60	2 20	3 15	3 15	2 10	
Boliviana, La Paz, Bolivia											310

RATING: 1-5 (5 IS HIGHEST)	REGIONAL CREDIBILITY AND INFRA- STRUCTURE	ORGANIZATION, MANAGEMENT & FINANCIAL STABILITY	MODELS OF INNOVATION IN EDUCATION	EXPERIENCE WITH EDUCATION PROJECTS (esp. donor- assisted)	EXPERIENCE WITH EDUCATION RESEARCH	EXPERIENCE IN TEACHER TRAINING WITH TARGET GROUP (rural, disadvantaged, bilingual, reading)	ICT/ DISTANCE LEARNING	PARTNERSHIPS WITH PRIVATE SECTOR	PARTNER- SHIPS WITH PUBLIC SECTOR	COMMUNITY OUTREACH	TOTAL
Weight≻	15	15	10	10	10	15	10	5	5	5	100
Institutions ✓											
Universidad	2	1	5	4	3	4	2	3	3	2	
San Francisco de Asis, Bolivia	30	15	50	40	30	60	20	15	15	10	285
Universidad	3	3	3	3	2	4	1	1	3	3	
San Marcos, Peru	45	45	30	30	20	60	10	5	15	15	275
Universidad	2	5	1	2	0	1	5	5	3	1	
San Ignacio de Loyola, Peru	30	75	10	20	0	15	50	25	15	5	245
Universidad	2	2	2	4	1	2	1	1	3	2	
Aquino, Bolivia	30	30	20	40	10	30	10	5	15	10	200

Brief descriptions of the categories in the institutional ratings table follow below.

- **Regional Credibility and Infrastructure-** The team looked for regional credibility through agreements or partnerships with other institutions throughout the region coupled with proof of providing excellent services. The team was attuned to an institution's respect in the region, as well as infrastructure denoting permanence and stability.
- *Organization, Management and Financial Stability* The team reviewed financial solvency through perusal of balance sheets and annual reports, and looked for evidence of sound management and sustainable business practices.
- *Models of innovation in education* The team observed the institution's willingness to collaborate with a variety of organizations and to embrace innovative ideas.
- Experience with education projects (esp. donor-assisted)- The team looked for evidence of prior experience managing international funds and general knowledge about how to manage regional projects.
- Experience with education research- The team examined the institution's ability and interest in conducting research, including a vision for adapting and using this research in the curriculum and university programs.
- Experience in teacher training with target group (rural, disadvantaged, bilingual, reading)- The team identified previous experience with the CETT target group, as well as continuing commitment and interest in providing the best educational service to the most impoverished.
- *ICT/distance learning* The assessment team looked for the capacity to provide distance education with the best possible technology, and experience in distance education, especially with the target group (disadvantaged populations) of CETT.
- *Partnerships with private sector* The team identified the current situation at each institution in fostering partnerships with the private sector.
- *Partnerships with public sector* The team investigated the relationship of the institution with the Ministry of Education and other public-sector organizations, such as the pedagogical institutes that provide teacher training.
- *Community Outreach* The team considered institutions' current relationship with the CETT target populations.

D. Profiles of Four Highest-Ranking Institutions

Two major areas of the selected institutions were assessed: (i) organizational and (ii) technical capacities. Of particular importance in these broad areas were financial soundness, regional credibility and previous experience with education projects, including donor-assisted education projects and applied or practical research with marginalized groups.

Other areas identified in which CETT would be closely involved include innovative inservice teacher training, research development, instruction or research in reading readiness and bilingual approaches to reading, community outreach to marginalized groups, and technological capability to deliver quality distance education. The next section elaborates on the four institutions which showed the greatest capacity out of the twelve institutions assessed across the categories listed above. These institutions include Universidad Peruana Cayetano Heredia in Lima, Peru; Pontificia Universidad Católica del Perú in Lima, Peru; the Universidad Andina Simón Bolívar in Quito, Ecuador; and Universidad Núr in Santa Cruz, Bolivia.

a. Universidad Peruana Cayetano Heredia in Lima, Peru

Organizational Capacities

Universidad Peruana Cayetano Heredia (UPCH) is noted for its excellence in medicine and science programs. Despite its emphasis on the sciences, UPCH is gaining a credible reputation for its innovative education department that specializes in quality in-service education, both in poor districts of Lima and in Peru's remote areas (through well-designed distance education programs). UPCH has an exceptional capacity for networking and establishing partnerships. The university has a regional vision and currently has collaborative agreements with academic institutions in Ecuador and Bolivia. The university has strong linkages with other institutions in Peru as well. UPCH participates in a consortium of four institutions, which includes Universidad Católica in Peru.

The university is soundly managed and is financially stable. The team was provided with copies of the latest audit and annual reports of the Education Department. The university maintains affiliations with several institutions in the United States, including Johns Hopkins University and the University of Miami. It has ample experience with donor-funded projects.

Technical Capacities

UPCH is known throughout the region for its innovative approach to education and its commitment to excellence in teaching. The university places special emphasis on innovative teaching methodologies in addition to subject matter content. Distance education programs include self-study and work with tutors and in groups with the goal of translating theory into effective classroom practice for teachers in remote areas. The

program encourages teachers to engage in practical action research. UPCH runs a master's degree program unique in Peru, designed to train educators who wish to teach at the university level. The Education Department, in collaboration with five NGOs, has worked for six years in a community education project (initiated with private-sector financing), serving Peru's vulnerable groups. This program has been successful in improving student achievement in reading, as measured by a series of reading assessments developed by project personnel. The department wishes to initiate a special program to train teachers of children aged four to eight, and sees improvement of early reading instruction as an urgent need in the Peruvian educational system.

The dean and staff of the Education Department are concerned with addressing the serious limitations that in-service teachers have all over the country, and receive funding from the MOE to run in-service training programs to teachers. They have designed a distance learning degree program that is flexible and innovative, combining interactive on-site workshops and distance material that encompasses all the technology available. Teachers have the opportunity to exchange ideas, permitting them to return to their classrooms with new material and new approaches. UPCH has contributed to the quality of education in Peru. It has worked with principals and other school administrators and has collaborated with specialists in other areas. This university knows the target population of CETT and has worked with it for as many years as the department has been in operation. When the assessment team visited, the dean and staff were already working on ideas on how to tackle the reading problem in the country.

b. La Pontificia Universidad Católica in Lima, Peru (PUCP)

Organizational Capacities

La Pontificia Universidad Católica in Peru (PUCP) is an excellent university known for the quality of its general programs. Perhaps the most important private university in Peru, PUCP serves also as a reference for the entire Andean region. It has strength and breadth in departments that share an interest in education, such as sociology and anthropology. It is well managed, fiscally sound, and has the infrastructure and the technological capacity to run various types of distance education programs. In fact, the university moved early into distance education, developing programs in the 1980s to train staff in a nonformal program for preschool education (PRONOEI). It has ample experience with donor-related projects.

PUCP is very sound financially, administering its funds in one central office so as to lessen bureaucracy. One office is in charge of collecting the funds, primarily from student registration and tuition (60 percent). The rest of the funds come from a Peruvian philanthropist whose foundation was donated to the university. The property encompasses 45 hectares, mostly handled as rentals by the university, adding to about 40 percent of the income generated. Another source of funding is its donor-funded projects, such as with the Canadian International Development Agency (CIDA), CAN, the Inter-American Development Bank (IDB), and the World Bank.

PUCP appears less well positioned than the other institutions considered for developing and supporting an innovative program such as CETT. The institution is perhaps less agile due to its size and tremendous breadth of academic programs.

Technical Capacities

PUCP has solid program offerings in education. The university runs a wide range of distance education programs in various parts of the country and is engaged in several collaborative efforts. For instance, the university has an agreement with Fe y Alegría to provide a *licenciatura* to teachers completing a course of study at PUCP after having graduated from the four-year teaching institutes with a certificate.

Students must pass an entrance exam to gain admission to the university. After ten semesters, two years in general studies and three in a specialty, a student obtains the degree *Bachillerato en Educación*, which is equivalent to a bachelor's degree. The student's course of study has to be backed by a thesis or a competency exam, as well as proficiency in a foreign language, to earn a *Licenciatura en Educación*. Specialties are offered in Early Childhood Development, Elementary Education, Secondary Education, or in Education in Development. There is no specialty in reading.

The challenge the university faces now, as do all, is to rethink the educational offerings in terms of specialties, since there is a gradual lessening of interest and students vying for education as a career. With the lack of teaching jobs and a high supply of existing teachers, there is no market demand in this field. Therefore, the university is now looking at ways it can offer specialties in education, rather than the usual degrees. The university has not demonstrated a will to bring about innovation or explore new initiatives in reaching underserved populations. PUCP has also generally focused more on teaching theory and less on providing practical teaching experience in its pedagogical programs.

c. Universidad Andina Simón Bolívar in Quito, Ecuador (UASB)

Organizational Capacities

The philosophy and mission of UASB is to promote integration, cooperation, and coordination across the region. UASB is an autonomous academic institution dedicated to higher learning, research, and the transmission of scientific and technological knowledge. The university is the only academic institution that holds the distinction as CAN's academic representative. UASB pursues research agendas that have regional and local relevance, especially at the community level. The university prides itself on "taking its lead from the needs and interests of communities" (UASB's rector, 2002). Its sound organizational and financial status enables it to foster integration, cooperation, and coordination in the Andes.

The university supports activities that strengthen cultural and linguistic identity for the numerous indigenous groups in the Andes through its promotion of the concept of interculturality, an idea that enjoys support throughout the region. UASB's approach to intercultural education encourages dialogical relationships between Andean indigenous and non-indigenous groups while emphasizing the idea of integration. The university is revered for its ability to convene constituent groups made up of otherwise unlikely partners. UASB gathered government officials, indigenous mayors and representatives of indigenous-led NGOs to meet on issues such as human rights and the administration of indigenous law. UASB works effectively and productively with governments in Ecuador, and maintains a steady partnership with the government despite the volatility of Ecuadorean politics. UASB enjoys a high level of trust among indigenous groups and indigenous politicians.

Technical Capacities

UASB is recognized for its productive working relationship with the region's many cultural and linguistic indigenous groups. It is one of the few academic institutions that conducts applied research with African-Ecuadorean women in the drug-influenced northern border area, which constitutes Ecuador's greatest development challenge.

UASB has an ongoing graduate program in educational and school-based management. School-based management, which promotes the participation of school officials in school governance and parents in the selection of classroom teachers, is currently funded by IDB. The school-management model is reflective of the decentralization efforts in Ecuador. A large percentage of school directors receiving this management training are from primary and secondary schools, including school directors and ministry officials with positions in the National Office of Bilingual and Intercultural Education.

UASB has been the key institution in the development and implementation of secondary school reform at the national level. While focused at the high-school level, this reform has had an ongoing program of curricular reform that includes all levels of basic education. Recent re-engineering efforts in Ecuador include grade levels K-10 in basic education. The last three years of basic education are actually located within secondary-school buildings.

UASB currently offers a year-long, graduate-level specialty program in school management, as well as two open courses geared for teachers. These courses meet several days each month for a year and are designed for basic education teachers who work in the provinces and outside major urban areas. All of these programs include modules on multiculturalism. In addition, UASB is awaiting final approval by the country's accrediting agency for a master's degree program in education, which is scheduled to begin this coming year.

UASB has a project with PUCP in Peru on the history of Latin America. Forums with PUCP include issues around interculturality. With UPCH, UASB has a project on

traditional indigenous medicine. UASB partners with Universidad Salesiana, an Ecuadorean university that provides training for primary-school teachers.

d. Universidad Núr in Santa Cruz, Bolivia (UN)

Organizational Capacities

Universidad Núr (UN) was founded to serve the needs of rural Bolivia, beginning its programs in urban Santa Cruz and extending them via distance education to remote areas. Seeing the teacher as an agent of change, the university developed an initiative called the Training of Rural Schoolteachers as Community Development Agents Program. In 2000, UN received the "Pioneers in Education" award for this program, granted annually by the Bolivian Center for Educational Research and presented by the minister of education. The university is also involved in supporting development and sustainability in rural Bolivia. It has developed programs in five areas: a) Education, b) Democracy, Municipal Strengthening and Just Governance, c) Public Health, d) NGO Strengthening, and e) Business/Private-Sector Strengthening. This approach has given the university the ability to run many programs funded by a number of international donors and the private sector.

Since its inception, UN has been sustainable with tuition income and external funding for its extension activities. The university collaborates with organizations in health, education, production, and social sectors at local, regional, and national levels through joint programs and technical assistance. Funding has come from national and international donors, such as: Fondo de Inversión Social, the World Bank, USAID, CIDA (Canada), JICA (Japan), GTZ (Germany), UNDP, UNICEF, CARE International, the Belgian Government, British Mission, IDB, and Plan International. Activities have included the areas of public health, public administration, participatory rural appraisal, rural management, sustainable agriculture, literacy, gender training, training rural schoolteachers, and NGO strengthening.

Technical Capacities

UN is committed to quality and innovative education, and has demonstrated its efforts to link whole language and phonics reading approaches to early reading both for Spanish-dominant and indigenous-language dominant speakers. The university pays particular attention to training uncertified teachers, who have no pedagogical background, but are expected to apply Bolivia's new educational reforms in their classrooms. UN is presently working with UNICEF to determine how best to teach Spanish as a second language to indigenous children. The faculty has written many good texts for courses such as Cooperative Learning and Evaluation and has developed a comprehensive model for teaching moral leadership. UN has delivered its moral leadership training to other Andean countries where the importance of values-based education is becoming increasingly pivotal to the development of democratic societies. The university also demonstrates state-of-the-art capacity in technology. As one of the six universities chosen by the MOE to work with the national teacher training institutes, UN runs three teaching institutes, two of which are indigenous (Guarani).

III. DESIGN RECOMMENDATIONS

Education in Bolivia, Peru, and Ecuador is conditioned by changing political trends, by economies that vary in their stability and by the diverse needs of culturally and linguistically diverse indigenous populations. The CETT initiative must be regional in its coverage while being specific in its in-country delivery and implementation.

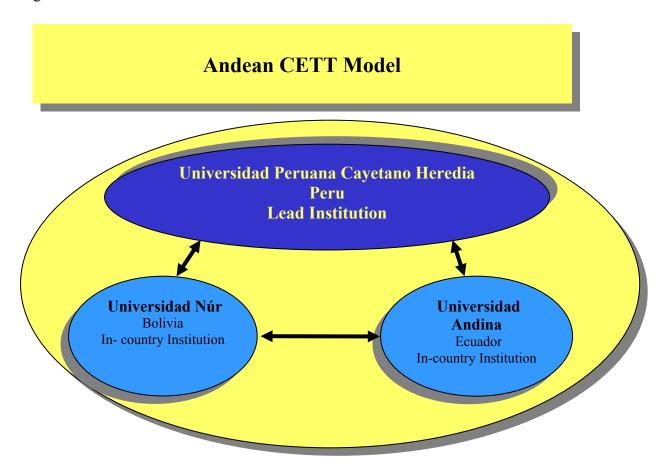
Among the four institutional profiles in this report, UPCH in Peru has the capacity to provide overall institutional leadership and to ensure regional collaboration with UASB in Ecuador and UN in Bolivia. PUCP in Peru, while widely respected for its programs, does not offer the capacity or enthusiasm for innovation required for CETT. Of the universities visited during this assessment, the team found UPCH to be the strongest in required capacities to develop an innovative, regional teacher training program in reading, especially in disadvantaged communities. UPCH has the regional and international credibility to play a coordinating role and to ensure equitable participation through UASB and UN. The university has demonstrated solid leadership in undertaking change and in implementing innovative programs, including the strong in-service teacher training offerings. These programs include many areas of interest and pertinence to CETT, including action research, training follow-up, distance education and mentoring programs.

UASB's strengths are its capacity to administer and manage projects that reach beyond university walls, a commitment to marginalized groups, and a reputation for promoting interculturality. UN can contribute its successful outreach to isolated rural communities, its capacity in distance education and its focus on training teachers as social change agents. The combined efforts of these three institutions, UPCH, UASB and UN, would ensure regional coverage and effective project implementation.

Assessment team members highly recommend that USAID and its Andean academic partners work diligently to draft a design that plots a short line between CETT funding and the target groups, i.e., practicing teachers and children in disadvantaged schools and areas, including students who enter school whose first language is not Spanish. It is strongly recommended that CETT partners design mechanisms to streamline funding expenditures and locate major CETT financial and human resources at the teacher training and school levels rather than at the university level. It is anticipated that country-level participating institutions will collaborate with smaller universities or pedagogical institutes that are more experienced at training primary-school teachers. NGOs with experience in successful and effective classroom-based teacher training can add their knowledge and skills to CETT programming.

The following graphic depiction (Figure 1) illustrates the organizational model for the Andean CETT recommended by the assessment team. UPCH would serve as lead institution, collaborating closely with UN and UASB to provide all key project outputs and ensure delivery of CETT services.

Figure 1.



A. Advantages of the model

- This model supports efforts for Andean collaboration.
- The institutions recommended in the model above have regional and international credibility.
- A participating institution in each country will ensure country-specific CETT implementation, fair representation, and wide coverage.
- The universities recommended above have success in reaching out to needy communities and have experience in using university resources to respond to societal needs.
- Each institution demonstrates individual strengths. UPCH links theory with practice as evidenced in its non-hierarchical staff management practices and its strong in-service teacher training program; UN trains teachers as community and social change agents; and UASB forges links between divided political parties, especially between government and indigenous groups.

- All three institutions are recognized by donor agencies for their efficiency and effectiveness in donor-assisted projects.
- The three institutions demonstrate interest for, and ability in, collaborating with the nonformal sector.

B. Disadvantages of the model

- The contract with a lead institution would include subcontracts with in-country institutions and could increase costs.
- Bureaucratic layers of university systems could drain CETT funding and divert attention away from the classroom if not monitored.
- In part because reading has not yet been developed as a specialty in most of Latin America, these three institutions are not particularly strong in reading instruction, but will need to build capacity in this area through technical assistance.

C. Recommendations

- It is recommended that UPCH in Lima, Peru serve as the lead institution in a
 consortium with in-country institutions in both Ecuador and Bolivia. UPCH's
 reputation as an educational innovator, its demonstration of non-hierarchical staff
 management, its range of skills and breadth of reach, its established quality
 educational programs, and its service to marginalized community groups qualify
 it to provide leadership and effective collaboration with institutions in Ecuador
 and Bolivia.
- 2. It is strongly recommended that UASB in Ecuador and UN in Bolivia complete the consortium as both universities have expertise in rural development, bilingual and intercultural education, and educational leadership. These areas of expertise can enhance the design and operation of the Andean CETT. Together, these institutions can identify reading expertise that should be central to CETT implementation. A consortium institution in each country of the three countries involved in the Andean CETT would ensure regional coverage and would encourage the lead institution to expand its reach and service.
- 3. Strong and effective NGOs, such as Fe y Alegría, should be considered as viable teacher trainers or project implementers. UPCH and UASB recognize the important role that many NGOs play in teacher training and school reform and have collaborated with NGOs. The recommended consortium institutions have existing collaborative agreements with partnering institutions in their own countries and across the region.
- 4. While assessment team members strongly recommend that UPCH act as lead institution in Peru collaborating with UASB in Ecuador and UN in Bolivia, UPCH could be given the option of considering an alternative model or could implement CETT by itself.

IV. REGIONAL OVERVIEW

A. General Context

This regional overview will focus on the three Andean countries incorporated into the assessment framework for CETT—Bolivia, Peru, and Ecuador.

The three countries are geographically diverse and fragmented, with some parts dominated by the Andes mountain range and others the Amazon jungle. The mountainous terrain contributes to social fragmentation and economic difficulties, as do natural disasters, such as volcanic tremors and earthquakes. The weather phenomena of *El Niño* and *La Niña* in Peru have caused serious flooding in coastal areas, as well as mudslides throughout the region. Rain damage from these weather phenomena often brings about loss of life and property, sometimes in the billions of dollars. In addition, the region often suffers from dry spells and drought.

People of mixed white and Indian descent, *mestizos*, are almost outnumbered by the indigenous people that inhabit the region. Bolivia's indigenous inhabitants comprise 56.8 percent of the total population or 4.1 million people. Peru has 9.1 million indigenous inhabitants or 40.8 percent of the total population. Ecuador has an indigenous population of 3.1 million or 29.5 percent of the total population. In these three countries, there are 65 languages spoken. After Spanish, the most prevalent languages are Guarani, Aymara, Quechua, and Shuar.

A historically segmented society, the region is primarily poor, with low levels of education, health, and nutrition. In Bolivia, for example, the average person completes less than seven years of schooling. Infant mortality stands at 69 per 1000 live births, while 10 percent of children under five are malnourished. Table 1 below shows that Bolivia, in comparison with Peru and Ecuador, is the least populated country but, has the lowest GDP per capita, life expectancy, and adult literacy rate.

Table 1. Basic Social and Economic Indicators.

Country	Population (in millions) 1998	Av. Annual Rate of Pop. Growth (%) 1990-1997	Population ages 6-14 (thousands) 1997	GDP per capita (PPP) 1998	Life expectancy at birth (yrs.) 1998	Adult Literacy (% ages 15+) 1998
Bolivia	8	2.4	1,734	2,269	61.8	84.4
Ecuador	12	2.2	2,478	3,003	69.7	90.6
Peru	25	1.8	5,032	4,282	68.6	89.2

Source: The World Bank, World Development Indicators, 2000; UNESCO and UNDP

State of education in the region and by country

Like the rest of Latin America, the Andean region is characterized by a large percentage of teachers with poor preparation, a high percentage of students that leave the educational system at early ages and enter the workforce with inadequate quantity and quality of education. Other factors include repetition, late enrollment, absenteeism, and unprepared, often undernourished, entering primary-school students.

While some statistics in the table below, such as net primary enrollment, give encouragement, other numbers point to a prevalent situation in the region. Numbers of total primary-school enrollment are higher than the population of primary school-age children due in large part to overaged students who attend primary school.

Table 2. Access to Education Indicators.

Indicators	Bolivia	Ecuador	Peru
Population (1999-2000)	8.1 million	12.4 million	25.7 million
Primary school-age population (1998)	1,597,446	1,679,595	3,400,925
Total enrollment in primary education (1998)	1,705,551	2,457,454	4,144,379
Net Primary Enrollment (%) (1999)	97	97	96
Primary Student/Teacher Ratio (1997)	22	28	27
Primary-School Teachers (2001)	38,737	32,279	72,641

Sources: UNESCO, UNDP, WORLD BANK, PREAL

Increasing numbers of children working instead of attending school and weak funding for education across the region indicate an alarming direction for education in these three Andean countries. According to the World Bank (*La pobreza en el Peru, 1999*), the national census in Peru showed that approximately half a million children were working, while other reports increased that number to a million and a half.

Another factor in the lack of any lasting effect from reform efforts is the allocation of government resources. The statistics in the table below on public expenditure on education reflect the lack of funds available to follow up on educational reforms and reinforce teacher training, salaries, and classroom support.

Table 3. Public expenditure on education by country, 1996.

Indicators	Bolivia	Ecuador	Peru
As % of GNP	5	4	3
As % of total govt. exp.	11.1	13.0	19.2

Source: UNESCO, Statistical Yearbook 1998

Today in Peru, only one out of three children attends school, with the school dropout rate among 12-year-olds the highest. Children were forced to work so that families could survive in the face of the drastic restructuring of the economy in the 1990s, which increased poverty by 55 percent. Statistics below elucidate the dropout problem in Peru, which persists even with the apparent improvement in literacy rates.

Table 4. Students repeating and dropping out of school in Peru.

Gender	\perp		Prin	nary				S	econda	ry	
Male students	1 st .	2 nd .	3 rd .	4 th .	5 th .	6 th .	1 st .	2 nd .	3 rd .	4 th .	5 th .
Promoted to another	87.6	79.3	82.3	87.2	89.1	88.4	84.1	86.2	86	89.8	87.7
grade (%)											
Repeated (%)	5.6	18.9	15.9	10.6	7.5	3.8	8.3	8.5	6.7	4.1	2.4
Dropped out (%)	6.8	1.8	1.8	2.2	3.3	7.9	7.6	5.3	7.4	6.1	9.9
Female students											
Promoted to another	88.6	77.5	81	87.3	89.9	87.5	88.3	89.1	90.1	93.3	90.3
grade (%)											
Repeated (%)	5.1	17.7	14.9	9.5	6.0	3.1	5.5	5.6	4.3	2.5	1.5
Dropped out (%)	6.3	4.7	4.1	3.2	4.1	9.4	6.1	5.3	5.6	4.2	8.2

Source: "El Desarrollo de la Educación" (Informe nacional de la República del Perú, elaborado por el MED para UNESCO, 2001)

In Ecuador, school attendance is mandatory from ages 6 to 14. In practice, however, many children drop out before age 15, and in rural areas only about one-third complete sixth grade. Nevertheless, enrollment in primary schools increased in the 1980s at an annual rate of 4.4 percent, faster than the population growth rate, which expanded rapidly in that time period for children aged 6 to 11. During the next ten years, school enrollment leveled off at around 90 percent. In the last decade, one out of ten children did not have access to school.

The expansion of schooling at all levels has been one of Ecuador's main objectives during the last decade and the country has progressed in this regard. Of the country's primary-school-aged population, ages 6 to 11, 116.4 percent are enrolled indicating that there is an overflow of children who are not appropriately placed at grade level. Of the country's total school-aged population, 88.9 percent are enrolled in primary schools and of those only 1,337,152 are enrolled in school at an appropriate age. Children who are inappropriately enrolled in classrooms (inappropriate to their age and ability) number 1,504,446.

In spite of efforts to provide access to education for all children, a significant number of children still do not complete their primary education. Of 100 children entering the school system, only 36 graduate in rural areas, while 67 graduate in urban areas.

Table 5. Repetition, Dropout and Graduation Rates in Ecuador.

Area	Repetition rate (%)	Dropout rate (%)	Children at school age attending school (%)	Graduates for every 100 students
Urban	9.7	17	90.2	67
Rural	15.2	34	87.7	36

IDB, Programa de Redes Escolares Autonomas Rurales, 1998.

Bolivia's educational situation is characterized by a large number of young children entering the school system who suffer from malnutrition and lack of stimulation in their early years, which adversely affects their ability to learn. A high percentage of students continue to leave school and enter the labor market with inadequate quantity and quality of education.

Table 6. Years in school, Bolivia.

Year	Average years of schooling completed for those leaving the school system	Students leaving the school system having completed 12 years (%)
1975	5.5	11
1985	6.5	17
1995	6.9	20

World Bank, Education Quality and Equity Strengthening Project, May 1998.

Bolivia's education indicators show also inequality regarding access to education based on gender. This tendency is most noticeable in rural areas, where the difference of attendance between males and females averages 7.6%; in urban areas, the difference is 3.3%. In both places, the difference tends to intensify with the increasing age of the students.

Table 7. School attendance. Bolivia.

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Age groups	Urban total (%)	Urban females (%)	Urban males (%)	Rural total (%)	Rural females (%)	Rural males (%)
6 to 14	90.9	90.1	91.6	74.9	71.6	78.1
15 to 19	65.9	63.3	68.6	29.3	24.3	33.8
6 to 19	82.5	80.9	84.2	62.9	59.3	66.2

World Bank, Education Quality and Equity Strengthening Project, May 1998.

B. Education Trends with Implications for CETT Design

Assessment team members found that a number of trends in the Andean region have implications for the CETT design. Taking these trends into consideration at the early stage of CETT development can increase the potential for successful implementation. The trends discussed below include (l) Andean heterogeneity and bilingual education, (2) reading instruction, (3) reforms in teacher training, and (4) interculturality.

Andean heterogeneity & bilingual education

The region's diversity of ethnic, cultural, and language groups has implications for the design of the Andean CETT, as it aims to improve reading instruction for disadvantaged primary-school children, including indigenous-language dominant groups. In Bolivia, indigenous inhabitants constitute 56.8 percent of the total population, or 4.1 million people. There are 46 ethnic groups in Bolivia, with 32 distinct languages, including composite languages of Spanish-Aymara. Peru has 9.1 million indigenous inhabitants, or 40.8 percent of the total population. There are 81 ethnic groups in Peru, with 60-65 distinct languages, including composite languages of Spanish-Quechua and Spanish-Aymara. Ecuador has 3.1 million indigenous inhabitants, or 29.5 percent of the total population, and 21 distinct indigenous languages. While it is generally agreed that the preservation of cultural identity is important and that early instruction in the child's maternal language is helpful, there is far less agreement on how that should be accomplished and which language(s) should predominate.

Across the region, support for bilingual education varies. In Bolivia, constitutional law supports the education of the large indigenous population. Quechua, Aymara, Guarani, and a large number of other indigenous languages, along with Spanish, are languages of instruction in Bolivia. In Ecuador, legislative support for bilingual education is comparatively weaker and is a politically sensitive topic. Ecuador's National Directorate for Intercultural and Bilingual Education (DINEIB) is an official part of the MOE system, and is fully staffed by indigenous Ecuadoreans.

Additionally, parents of indigenous students have differing views on the importance of instruction in the mother tongue. For example, indigenous Ecuadorean families who live in close proximity to foreign oil pipelines prefer that their children learn English rather than the maternal tongue as a way to ensure job security. A field visit to a private, Quechua-run primary school on the outskirts of Quito, Ecuador, demonstrated that indigenous primary-school teachers find it advantageous to teach indigenous children three languages – Spanish first, and Quechua and English regarded as equally important as the second and third languages.

Reading instruction

Assessment team members did not find evidence that methods of reading instruction in the early grades for practicing teachers are strong or well developed. Teacher training institutes and universities are moving away from a reliance on dictation, copying, and rote learning to other more flexible, integrated reading instruction approaches. The transition is not easy. In the limited number of course syllabi that were reviewed, insufficient emphasis was placed on teaching the fundamentals of reading instruction in any language. Bolivia appears to lead the effort in innovative reading instruction at present. As efforts in Bolivia have demonstrated, complex issues arise in reading instruction for indigenous language speakers, e.g., the need for multilingual teaching and learning materials and for adequate teacher training in multilingual teaching approaches. Empirical and applied research is needed in order to understand the best way to teach reading to children whose maternal language is other than Spanish.

All three countries assessed have revised curriculum guides and revised teaching materials. These reform efforts have not generally provided sufficient ongoing training and innovative methods for delivering new curricula effectively at the classroom level. Many new and revised materials are underutilized or ineffectively used by classroom teachers.

Because of this unique set of circumstances at the school level and the numerous donor-funded education initiatives already in place, the CETT initiative should be carefully designed in collaboration with Andean partners to ensure that CETT activity is tailored to specific local contexts and school- and classroom-level needs.

Teacher Training

A trend in the region is to professionalize teaching by raising teacher training requirements to the university level. Traditionally, three- or four-year teacher training institutes granted certification for primary-school teachers. These institutes are variously referred to as *institutos pedagógicos*, *institutos superiores*, or *escuelas normales*. However, a regional trend to upgrade the teaching profession is changing that practice. Certification for primary-school teachers is increasingly being put in the hands of four-year universities.

In Ecuador, where this shift has just begun, government spending that was historically channeled to pedagogical institutes is now being awarded to universities. The effect on institutes has been devastating, with institute facilities left to deteriorate. This is an unfortunate loss as institutes typically have a laboratory school on their grounds where practicing teachers can apply theory to practice in actual classroom settings with students.

With the new emphasis on universities, coursework, and requirements for education majors are not uniform. Pre-service training for teachers in the region varies in terms of length of time needed to become a qualified teacher and which institutions provide teacher certification. In Bolivia, it takes four years to become a certified, primary-school teacher, although one does not have to be a certified teacher to teach primary school. (There are approximately 23,000 uncertified primary-school teachers in Bolivia.) In Ecuador, a teaching diploma has traditionally involved a three-year program, although changes are currently underway in the Ecuadorean certification requirements.

In general, education majors take courses on the content of basic primary-school subjects such as math, science, and social studies. They might study child psychology or pedagogy. All require practice teaching. However, an education major can graduate prepared to teach math in the sixth grade and be assigned to a multigrade (grades 1-6) classroom with Quechua-dominant speakers. There was no evidence that methods of reading instruction in the early grades, or courses specializing in reading instruction for the indigenous child, are strong offerings at universities. Smaller universities, such as Universidad Saleciana in Ecuador or Universidad San Francisco de Asis (USFA) in Bolivia, specialize in primary-school training and could offer valuable collaboration with a lead institution in CETT.

As regional reforms are re-engineering universities to do what institutes have traditionally done, quality universities with academic strengths in areas other than primary education are beginning to collaborate with smaller universities that focus on primary education. A collaboration of such institutions would provide institutional capability combined with a primary education focus. The assessment team recommends serious consideration be given to NGOs, such as Fe y Alegría, to deliver the CETT program developed through the collaboration recommended in Chapter III. This NGO has been exceptionally effective at teacher training, as their training method is school- or classroom-based and curriculum is rooted in local realities. The accomplishments of Fe y Alegría in teacher training stand out for their impressive, practical depth in comparison to other Latin American universities

Interculturality

Throughout the Andean region, there is evidence that educators are committed to stabilizing the region by facilitating dialogue and interaction among various cultural groups, especially between indigenous and non-indigenous groups. A central concept, *interculturalidad* (interculturality), promotes valuing all cultures while discouraging separatism or extreme nationalism. Universities recognize needs shared across borders and collaborate with other institutions to multiply benefits to students. These groups of schools have successfully brought together cultural groups to tackle sensitive regional issues, such as indigenous law.

The social and political advances of indigenous groups have alerted policymakers and planners in the region of the potential political force of the indigenous population. This new awareness has made an impact on education by changing the profile of what effective or relevant 'education for all' means. In the region, there is a renewed appreciation for all Andean cultures.

One area in which all three governments have made strides is in access to education. Bolivia, Peru, and Ecuador have raised the number of students receiving primary-school education in recent years. Current data indicate high levels of primary-school enrollment (see Table 4).

C. Country/Regional Capacity

There is consensus among political stakeholders in Bolivia, Peru, and Ecuador that the quality of teaching is generally poor and CETT would add support to their reform efforts. Educators and NGO personnel agreed that teacher training for primary- and secondary-school teachers needs improvement.

Education reforms introduced modern pedagogical approaches in which children were active participants in their own learning. But in some instances, rather than presenting child-centered methodologies, most of the in-service training emphasized the goals of

their reform, such as in Bolivia. Reading was one of the most difficult areas of change and teachers found it very difficult to alter their teaching style so that students moved from phonemic awareness to actual meaning. Therefore, teachers have often applied old methods to new educational material, and have continued to teach reading with little or no focus on comprehension.

The renewed interest in improving the preparation of teachers in the region has spurred each MOE in each country to address teacher training reforms differently. Bolivia has placed an emphasis on training a new cadre of educational supervisors called *asesores pedagógicos* who would be responsible for doing school-based teacher training. These new teacher trainers have received continued training and the MOE is relying on this approach. Along with the training of these *asesores*, the MOE has plans to place Teacher Resource Centers in each cluster of schools (*núcleo*). These centers will have libraries, resources, and facilities for teacher training including computers and Internet service.

The National Directorate for Teacher Professionalization (DINAMEP) within Ecuador's MOE is the main provider of in-service teacher training. In Peru, the MOE's National Plan for Teacher Training (PLANCAD) was a first step to improve teacher training by using other institutions rather than the universities to do the training. In practically all of the countries in the region, a number of NGOs such as Fe y Alegría provide excellent, school-based teacher training. In fact, NGOs have gained the reputation of providing teacher training that is effective in the long term because these programs are typically classroom-based, implemented as close to a school community as possible and the curriculum is typically based on school community realities. Nearly all of the in-service training is donor-funded, the World Bank, and IDB as primary donors, with GTZ (Germany), JICA (Japan), and CIDA a close second.

Areas which the Andean CETT might be able to address are: (1) the lack of preparedness of student teachers, (2) lack of supervision of follow-up of new teachers who have completed teacher training, (3) active, experiential training methods for teacher trainers, (4) teaching strategies for the multicultural and multilingual classroom, (5) training school supervisors to provide technical assistance to classroom teachers, and (6) simple tests and assessments for reading in the early grades.

Financial support possibilities

Different in-country financial resources could contribute to CETT. Some are major corporations such as the Telefónica Foundation, Ford Foundation, Phillip Morris in Peru, and FUNDETIC in Bolivia. A team member spoke with some of these companies, who then voiced an interest in CETT, but asked to be approached with concrete needs. Once a specific plan for the program is articulated, these organizations are willing to join in the effort.

Peru 2021, a group of businessmen affiliated with CONFIEP (La Confederación Nacional de Instituciones Empresariales Privadas), is another viable private-sector partner for CETT. This group is concerned about the quality of education and promotes initiatives in

education, the environment, and social responsibility. Their immediate project is the decentralization of education by training principals, other school administrators, teachers, and parents in how to improve their work practices and school system. Interested in the potential of CETT, leaders of Peru 2021 offered to help with educational materials.

Public-private support partnering possibilities

As has been already mentioned, NGOs are very prominent in all three countries and highly involved in teacher training. One of the most respected across the region is Fe y Alegría, a Jesuit organization that runs public schools in 14 countries in Latin America. In Peru, they run 55 schools that include preschool, elementary, secondary, and technical programs. In addition, Fe y Alegría is now running four rural networks of schools that include a network of 19 schools in Malinga (Piura), a second network of 30 bilingual schools (Quechua) in Quispicanchi (Cuzco) and a third network of 19 or 20 schools in Ancash (Quechua), including some bilingual schools in the mountainous regions. The fourth network, along a new highway, is made up of 16 or 17 schools in Iquitos.

In Bolivia, Fe y Alegría works in El Alto, a poor part of La Paz, and in many departments of the country. The *teleaulas* (classrooms with televisions and VCRs) that they are planning to finish building all over the country could be possible sites for delivering training by the Andean CETT. In Ecuador, as was previously mentioned, the organization works closely with the DINEIB.

Another branch of Fe y Alegría is the Centro de Multiservicios Educativos (CEMSE). It provides services to a network of schools with libraries and laboratories, as well as health services to schools in the network. The CEMSE in Bolivia expressed a great interest in CETT. Once these centers are equipped with computers, they too could be excellent sites for teacher training.

GRADE, el Grupo de Análisis para el Desarrollo in Peru, is a private non-profit research center dedicated to studying the economy, environment, and education. They work towards making their research serve in a useful process to change or adjust policies and development implementation. They are strong in research and test development, and interested in helping CETT in either of those areas, as well as possibly in designing and planning.

The TAREA Educational Publishing Association (in Peru) is an NGO that does far more than publishing. It produces an excellent monthly journal, which includes articles by leading educators and an integrated curriculum, which includes elementary text books. Their curriculum was developed by integrating the subject areas from the MOE's official primary grade curriculum; its emphasis is on starting from the child's world and interests through experiential units in which the child participates actively in constructing his or her own learning. Other publications include several books on the teaching of reading, including "Read Better in order to Teach Better", a book designed to help teachers improve their own reading comprehension. TAREA is interested in the CETT program

and could bring particular expertise to bear in the production of materials and/or teacher training.

The NGO Project Concern works in El Salvador, Nicaragua, and Bolivia. Its strengths are in health training, as in coordinating the Title II Food for Education program. With funds from USDA's Global Food for Education Program, this NGO will be working with 25 private volunteer organizations in a pilot project. Project Concern will be training 1,500 teachers, including *asesores pedagógicos* in participative classroom methods. Its focus is primarily on education for democracy and gender issues. Project Concern already has a working relationship with UN and would assist in teacher training offered by CETT. Project Concern is also interested in documenting lessons learned in the field in order to disseminate information to major institutions.

The Centro Boliviano de Investigación y Acción Educativa (CBIAE) has had a seven-year agreement with the MOE. It provides teacher training and follow-up. The CBIAE works directly in the schools involving all the teachers of each school, rather than working with individual teachers. Teacher teams are formed and they learn to work together and to identify basic learning needs that allow them to make adjustments in the curriculum. Funded by Holland, Germany, and Spain, the CBIAE also does research and is recognized as a leading research institution in the country. This institution would like to participate with CETT by doing research among indigenous groups, including Guarani, Aymara, and Quechua speakers.

There are many excellent NGOs the team did not visit in Peru that could be tapped to provide various services to CETT. For example, the Consortium for Research and Educational Development (CIDE) ran a successful USAID project in Ayachucho on democratic schools, provided in-service training through the MOE's PLANCAD program, and is in the NGO consortium sponsoring the Project for Educational Innovations in the District of La Independencia (PIEDI).

The GTZ bilingual programs work with the MOE in Bolivia, Peru, and Ecuador, and would welcome the contributions of CETT. As GTZ engages in many of the same activities that are proposed for CETT (teacher training, development of materials, etc.), it would be important that CETT collaborate with GTZ to avoid duplication of effort.

Distance learning technologies

The Internet is used for much of the training that reaches rural areas currently, and rural inhabitants have more and more access to Internet cafés. In Bolivia, municipal libraries and resource centers have computers connected to the Internet. Universities—such as USIL, PUCP, and UNMSM in Peru—have extensive teleconferencing networks, although in some case these have not yet been used extensively for training teachers. Among those three institutions, PUCP should definitely be tapped for its expertise in distance education.

Peruvian President Toledo's Plan Huascarán will place computers in many elementary and secondary schools, and should also be providing teacher training in computer use.

There are still, however, many remote areas in the region without access to electricity. Any distance education program must take into consideration the challenging geography, extreme poverty, and other obstacles such as lack of electricity or phone service in remote parts of these countries.

V. TEACHER TRAINING

A. Overview

This section will discuss current activities in pre-service and in-service training in Bolivia, Peru, and Ecuador, then explore specific training issues. It is generally agreed that teacher training issues are strong contributors to underachievement in the Andean region's schools. Current teachers need more preparation if they are expected to make curricular adjustments or use new methodologies efficiently.

In spite of educational reforms and numerous donor-funded interventions, teachers still need much more training, particularly in the area of early reading instruction. The educational reforms encouraged teachers to use participative methodologies that would involve children actively in their own learning. This was a drastic change from the former emphasis on dictation, copying, and rote learning. Many teachers have only begun to change their approach and need ongoing classroom support and supervision.

The regional emphasis on new approaches to reading instruction has been confusing for many teachers. Teachers need instruction on specific methods for effectively integrating both phonemic awareness and comprehension. In most classrooms all children are engaged in the same activity at the same time. Teachers must learn how to tailor instruction to student needs. Teachers require assessment instruments to help them track student progress, diagnose individual needs, and plan appropriate instruction for different groups of children.

B. Pre-service Teacher Training

There are several programs offered for pre-service, with or without a degree, and issued by either a teachers' college or university.

Institutos Superiores Pedagógicos (ISPs)

Pedagogical institutes or teacher colleges traditionally trained graduates of secondary school to become teachers. In some countries these schools were called *Institutos Normales Superiores* (INS), or just *Normales*. Prior to the reform, universities were not involved in pre-service education; teachers who graduated from the normal schools were certified to teach, but received no degree. However, because of great concerns about the very low quality of the normal schools, the MOEs gave oversight of these institutes to the universities, as observed in Bolivia.

Bolivia has 24 normal schools that provide a four-year program to receive a technical degree after the completion of high school. Those graduating from an INS today are certified and receive a Superior Technical Degree. They then have the option to attend a

university for two years to receive a college degree or *licenciatura*. However, 23 percent of practicing teachers are not certified, and many universities also run a new program for these uncertified teachers (*interinos*), if they have taught for five years.

In Peru, both universities and teacher training institutions called *Institutos Superiores Pedagógicos* (ISPs) offer pre-service training. All pre-service training is offered at the university level, after completing secondary school. Students in the ISPs attend for four years and are then certified, but lack a degree. Those who wish to receive a degree may attend a university program in order to receive the *grado bachiller*, or bachelor's degree.

Thirty pedagogical institutes (IPEDs) offer pre-service teacher training in Ecuador. Twenty-six of those institutes are considered *normales* or *Institutos Pedagógicos*, and four are intercultural and bilingual pedagogical institutes (IPIBs), i.e., *Institutos Interculturales y Bilingües*. These schools are part of the public education system run by the MOE and follow the requirements of MOE curricula and guidelines. The IPIBs are administered, accredited, and supervised by DINEIB, an office within the MOE that is described as "a parallel MOE" with all of the responsibilities, but little respect and recognition and uneven financial backing.

University Education

Universities throughout the region offer programs of study for the *licenciatura* for those specializing in preschool or primary education. The program of study for primary-school teachers in pre-training does include coursework on reading. But the course title and description in catalogues that were reviewed indicate that the approach to reading is theoretical rather than practical (without a focus on elements such as pre-reading readiness skills).

However, no advanced degrees or specialized graduate work in reading are provided in any country. In the universities visited, there were no reading specialists on the teaching staff, and there are no reading specialists available in schools. Reading was considered to be a critical weakness by every person interviewed. The needs most emphasized were the provision of quality teacher training in early reading instruction that emphasizes active participation of children in their own learning, as sought by the ministerial reform. In addition, there is a need for research on reading methodologies, formative evaluation, and the provision of differential instruction. Some interviewees suggested that support for a master's degree program or graduate specialization in reading could be an important contribution to Andean education.

It is generally believed that university study will improve and strengthen teachers' knowledge of content matter and the use of new methodologies. There is no evidence yet that this is happening. Universities in general remain detached from the realities of the classroom. Though some were found to be very innovative and connected to the realities of teachers in rural areas and inner-city, impoverished areas (i.e., USFA in Bolivia, UPCH in Peru and Universidad Salesiana in Ecuador).

C. In-service Teacher Training

With the introduction of the educational reforms, it was clearly understood by all the MOEs that something had to be done with the current poorly trained teachers and not performing as desired. Each country looked into the form of training that could best suit financial and socially demanding needs. As a result, new venues of training have been sought. Through distance education and on-site workshops via universities or NGOs teachers may now benefit from additional training options.

The Andean region, which often relies on packaged materials (e.g., cassettes and videos, or radio) for in-service teacher training, is beginning to explore the possibility of technological advances. Some of the universities offer Internet correspondence with instructors while others have teleconferencing capabilities, but the use of communication technology and innovation is not pervasive.

Each country has approached in-service as a challenge, considering the distant location of the teachers in some cases, and the need to provide innovative methodologies and systems. The Andean countries believe in a personal and consistent follow-up and do not believe in multiplier effects or cascade training. In some cases, professors have had to travel to the distant areas to follow up with "circles of study" and then do testing. All inservice training is done at the expense of the teacher/participant, with exceptions of donor-funded training programs where teachers did not pay for their training. Nearly all teacher training has been funded by IDB, the World Bank, and GTZ.

Peru, for instance, just completed a five-year World Bank project, Mejoramiento de la Educación Primaria (MECEP), providing teacher training to almost all primary-school teachers through the Plan Nacional Capacitación Docente (PLANCAD). contracted with institutions throughout the country to provide the designated training. Training providers included universities, NGOs, ISPs, and associations of teachers. Many of these institutions were strengthened by their association with this program and became aware of current teaching methodologies. Trainers were required to give followup assistance in trainees' classrooms, and therefore learned first hand about the problems of their local schools. The MOE is now developing a plan for continuous teacher training in which approved training would be offered by a similar network of contracted institutions. Teachers would pay for this training; however, the plan proposes to provide increments in the pay scale based on additional training or degrees. The experience of PLANCAD has convinced many Peruvian educators that in-service training must be school-centered. That is, rather than centering the training on one grade or just one or two teachers, the training must develop from a school plan based on its needs. At least one group of teachers per school should be trained together, preferably with the school principal.

In Ecuador, the most recent reform in education, with implications for in-service teacher training at the primary-school level, is IDB's US \$50 million Redes Amigas (School Network) project, which is in its second year in 2002. Redes Amigas is a school-based management strategy that involves over 220 school networks throughout the country.

School officials, classroom teachers, and parents form the Redes Amigas, which is involved in total school management, including hiring and dismissing of teachers.

Bolivia's World Bank teacher training project is ongoing and implemented by universities and NGOs. Initial in-service training provided to the teachers was focused mostly on the goals of the reform, and great emphasis was placed on the training of a cadre of advisors (asesores pedagógicos) who were trained and placed in each núcleo. They were to be responsible for training and supervising the teachers. Unfortunately, many were young teachers, sometimes inexperienced, who in many instances were not well enough prepared and encountered resistance from the older teachers. The asesores pedagógicos have received continued training, and the MOE is continuing to rely on this approach.

D. Specific Training Issues

The research team compiled a list of a variety of educational issues and needs gathered during interviews that require attention to meet the demands of the Andean educational system reforms. Although the primary focus of this assessment was not teacher training needs, the assessment team was able to identify some needs expressed by stakeholders. Among the needs the team heard about are the following: the need for universities to move from theory to practice, the need for teachers to receive pre-service training rather then enter classrooms untrained, the need for special training in the teaching of reading, the need for training connected to the realities of disadvantaged communities, and the need for training that fits the teaching position to which one is assigned. The team strongly recommends that a thorough needs assessment of teacher training be undertaken before CETT initiates operation. The research team enumerated the following areas of exploration for determining needs:

Quality in the classroom

There is a consensus that the quality of teaching is generally poor. Tests done by international donors have shown that students are not learning nor meeting the required competencies. The reforms were enacted to readdress the importance of quality education, and teacher training has become the cornerstone of that effort. It was often mentioned that along with new methodologies and new theories, teachers should also learn how to use their new classroom resources effectively. What had been previously given to them had merely confused them and much of the material was not properly used. To some extent, the new texts had been shelved and the old ones continued to be used. Teachers were comfortable using what they knew best even though the material was obsolete and ineffective.

The following issues should be considered by CETT:

- Accountability
- Testing and assessment of teacher performance and student achievement
- Child-centered learning

- Effective use of existing, new, well-designed materials based on new pedagogies
- Capacity to put innovative theories into practice

Multigrade classroom/reading

Special curricula and teaching methodologies are needed for these non-graded classrooms, and, especially, methods for effectively teaching reading. There are two major disadvantaged groups in Andean education — those in the poor areas around the cities, and those in rural areas. In general, the remote rural population is the neediest. Most elementary schools in the rural areas are multigrade, in which two or three teachers each have more than one grade in a classroom, and one-room schools taught by a single teacher. Teachers in remote areas are the most likely to lack certification, because it is difficult to entice teachers from the cities to these areas. Most new training has not succeeded in reaching many rural areas. In addition, since many rural students miss school frequently, fall behind, repeatedly fail grades, and eventually drop out, Peru is designing a plan that includes the development of non-graded classrooms in which students could move at their own pace. This approach would be similar to that used in Colombia's Escuela Nueva program for rural schools.

The following are areas in which CETT should be involved:

- Increased access to successful reading instruction methods, especially for multigrade classrooms
- Age/grade appropriate teaching
- Reading inventories and frequent and consistent testing
- Classroom management

Testing/Assessment

Some countries have advanced in developing tests to measure student performance; however, data will not be used to assess achievement in individual schools, since it is based on sample data. Interviewees suggested that teachers need additional technical support in techniques of diagnostic classroom evaluation. Therefore, the following areas are suggested for CETT:

- Development of a habit of formative reading assessment and achievement testing
- Consistent and effective assessment of teacher performance
- Consistent and effective testing of reading performance and achievement
- Emphasis on technical assistance to classroom teachers through effective supervision by *asesores pedagógicos* and school principals

Bilingual/Intercultural Education

Reading instruction is particularly complex in the Andean region because of the number of indigenous languages spoken. Although considerable work has been done in the region on bilingual instruction and the production of materials in indigenous languages, research on the process of learning how to read is needed in order to understand the best way to teach reading to children who speak other languages. It is children who begin

primary school speaking an indigenous language who are considered to be those in most need.

Teachers need training in bilingual programs: how to teach reading of indigenous languages and Spanish to mixed groups of Spanish-speaking children and speakers of other languages.

It is recommended that CETT focus on:

- Effective bilingual education
- Strengthening and broadening current efforts to be culturally inclusive rather than exclusive

VI. CONCLUSIONS

Assessment team members recommend that a multi-institutional model would best serve the goals and objectives of the Andean CETT. Specifically, UPCH in Lima, Peru, has been recommended to serve as the lead regional institution in collaboration with UASB in Quito, Ecuador, and UN in Santa Cruz, Bolivia. The unique characteristics of the education sector in each of these Andean countries justify having an institution in each country to participate in CETT. These institutions would constitute a regionally credible, institutionally sound, administratively efficient Center of Excellence that would be able to coordinate appropriate in-country resources from both the formal and nonformal education sectors. The combined resources would be focused on a common goal, but implemented in ways that are appropriate and relevant to each country's context. This consortium model would ensure regional coverage and effective project implementation.

The assessment team acknowledges the level of complexity and cost that a consortium model could require, but asserts that a viable CETT in the Andean region must be built on country-level institutions that typically approach their work following a networking model. These institutions have been recommended for their precise understanding of the needs of teachers and children in disadvantaged school settings.

The CETT institutional partners should provide administrative and managerial leadership that is not only efficient and effective, but demonstrates an institution's ability and commitment to fully serving the needs of disadvantaged primary-school students, including those whose maternal language is not Spanish. The common goal should be to improve the skills of primary-school teachers in reading instruction and, in turn, the education of children in grades one through three.

It should be noted and stressed in negotiations with the recommended institutions that the financial scope of the Andean CETT, while formidable, is modest in comparison to the larger donor-assisted educational initiatives ongoing in each of their respective countries. Proposals for the CETT program implementation should be cost effective and should demonstrate how financial and human resources are targeted to improving teacher-training skills in reading instruction for primary-school students.

Next Steps

 A follow-up team, which would include USAID and CAII representatives, would visit with key representatives of UPCH in Lima, Peru to initiate the first stage of negotiations. Team members would provide information to UPCH representatives about the recommended consortium model and obtain UPCH's agreement. A Memoradum of Understanding would be drafted and key representatives of UPCH, UASB, and UN would be included in these preliminary talks.

- Following these talks with UPCH, UASB, and UN, a concept paper would also be drafted to outline the technical components of the Andean CETT and give greater clarity to CETT design in the region.
- During this follow-up meeting with UPCH, UASB, and UN, a timeframe for an in-depth teacher training needs assessment and a country capacity assessment would be agreed upon.
- CAII would field two education specialists to visit teacher training sites affiliated with all three universities, as well as to visit classrooms in disadvantaged areas in each country. It is advisable that the CAII team of two consultants work in partnership with in-country primary education specialists during these field visits. An assessment of country capacity would be undertaken also with the cooperation of the three institutions selected to implement the Andean CETT.
- The CETT program development process would focus on consolidation of the project within the three institutions. A program proposal would be developed by representatives of each lead institution and USAID. The program design would include mechanisms for coordination between the lead institution and the country-level institutions. The parties would also agree on mechanisms for contracting and delivery of services. CETT's strategy would need to contemplate the gradual independence of the country-level institutions as they build capacities and can assume greater responsibility in the implementation of CETT.

ANNEX A: SCOPE OF WORK

I. Andean Assessment Background

A. Presidential Summit Initiative

At the April, 2001, Summit of the Americas meeting, President George W. Bush announced a new initiative to establish three regional Centers of Excellence for Teacher Training in the Caribbean, Central America, and the Andean region of South America with the goal of improving reading instruction through enhanced teacher training. The three Centers are to be established in existing institutions in the Caribbean, Central America, and the Andean region of South America. It is expected that about 15,000 teachers will benefit from training over a four-year period.

While it is understood that a wide range of systemic issues impact the quality of reading instruction, the focus of the Center of Excellence will be teacher training. The goal will be to improve reading instruction in the early grades (1-3) by upgrading the knowledge and pedagogical skills of poorly qualified teachers. Teachers and administrators who work with poor populations in rural and urban areas will be targeted.

It is expected that the Centers will use a training-of-trainers approach to reach more teachers and administrators, will provide a clearinghouse of teacher materials, and will use information and computer technology as appropriate to facilitate information-sharing between institutions and to increase the scope of teachers' access to training and materials.

USAID is developing this project with guidance from an advisory panel of U.S. and Latin American experts. The Department of Education, the OAS, the MOEs, business and citizen groups, faith-based organizations, international donors, and other hemispheric governments are being enlisted to form a partnership with USAID for the implementation of the program. USAID is soliciting matching funds from the private sector and will develop a mechanism for continuing to solicit and manage the funds and, in the long-term, provide sustainability to the Centers.

B. Andean CETT

The Andean region is the third region to be assessed for establishment of a Center of Excellence for Teacher Training. Similar assessments have been done for the Caribbean and Central America. At the time of writing, design discussions/negotiations are underway with partners in the Caribbean to develop a Caribbean CETT, and a second assessment is being conducted in Central America.

Lessons from the Caribbean and Central American CETTs

From the assessments and negotiations to date it appears that the Caribbean CETT will consist of five components. The needs and capacity assessment for Central America suggests that the same components are needed with differing details and emphasis in the Central American CETT. While the components are similar, it is clear that regional differences in political, economic, social, and educational structures and resources make feasible very different organizational and management structures for these two regional CETTS. Similarly, preliminary desktop research on the Andean situation suggests that the same five components also are needed in the Andes. And again, the organization and management of the Andean CETT will be dependent on local resources and conditions.

The five components anticipated to be a part of CETT are:

- (a) identification or development and distribution of diagnostic/performance assessment tools;
- (b) identification or development and distribution of teacher and learning materials;
- (c) in-service teacher training (with follow-up)—this is expected to involve a training-of-trainers program so that teachers and school administrators can take the training back to their communities;
- (d) use of participatory action research to promote collaboration and ensure relevance of CETT programs; and
- (e) appropriate application of information and computer technology to other components—such as linking teacher training institutions, think tanks, schools, teachers, and universities through an Internet portal to share materials, successful practices and "lessons learned", and providing teacher training via distance education.

As in the other regions, the implementation of the Andean CETT will start small—with a limited number of schools and interventions in one or more countries—and expand to more sites as the efficacy of the initial intervention is demonstrated.

Andean Background

This section will briefly summarize what we know about the state of literacy, education, and teacher training in the Andes.

Countries to be served

Once fully operational, the Andean CETT is expected to serve teachers in three Andean countries: Bolivia, Peru, and Ecuador.

II. Scope of Work

A. Goal

The goals of first phase assessment in the Andes are to:

- 1) Assess the teacher training needs and capacities related to reading instruction in the three Andean countries to be served by the Center of Excellence (through desktop research and field work).
- 2) Identify potential institutions in the region with the capacity and interest to serve as the host institution or partner institutions (e.g., in a consortium or providing assistance to the host institution) on the Andean CETT, and assess the capacity of the most promising institutions.

The field focus of this assessment should be on identifying and evaluating potential host institutions. Follow-up assessments of teacher training needs and capacities and country capacities will be conducted later, as needed. (This change from the assessments in the other two regions is necessitated by the desire to identify a host institution and negotiate an understanding in time for the 2002 anniversary of the Summit of the Americas.)

B. Research Methodology

- 1) Desktop research will be conducted in advance of the fieldwork to identify the teacher training needs and capacities in reading instruction in the three countries to be served by CETT. The research findings will be summarized for the team before they leave for the field
- 2) Field research will be carried out in each country to:
 - (a) Verify and augment the findings from the desktop research on teacher training needs and country capacities through discussions with teachers' unions, the MOEs, parents, the private sector, and other stakeholders.
 - (b) Identify and assess potential host and/or partner institutions for CETT through meetings with: USAID missions, MOEs, teachers' unions, potential host institutions—including universities, NGOs, and other education partners—and other stakeholders.

Note: the emphasis in the fieldwork should be on (b).

C. Key Questions and Issues to Consider

Teacher training and reading instruction needs and capacities

- a) To what extent are teacher training issues specifically regarded as contributors to underachievement in the Andes?
- b) To what extent is reading instruction perceived as being a critical problem in Andean education systems and by which stakeholders? What specific aspects of reading instruction are deemed problematic?
- c) What are the major teacher training needs in disadvantaged/poorer communities? How do these differ from other communities, especially with regard to reading instruction?
- d) Are there special programs to address the learning/reading needs of children whose mother tongue is Quechua, Aymara, or another indigenous language?
- e) To what extent do existing institutions address the teacher training needs of disadvantaged communities? What are the major gaps in service? How might these be addressed?

Country capacities

- a) Which institutions and individuals are the key political stakeholders in the region? The key leadership? What is the political will to support CETT?
- b) What are the vision, interest, and commitment of the MOEs to CETT? Of other regional stakeholders such as teachers' unions or other teacher training institutions? What will be the strategy for engaging these stakeholders in CETT?
- c) What in-country financial resources are available to help the sustainability of CETT?
- d) What will be the strategy for engaging the U.S. and Central American private sector and NGOs in the sustainability of the Center of Excellence? Will they have a role in guiding the Center?
- e) To what extent is the private sector willing to support teacher training through the vehicle of a Center of Excellence for Teacher Training?
- f) To what extent are distance learning techniques and/or ICTs presently used for teacher training and/or for primary education? What improvements could be made for more effective use (including other technologies)?

Institutional capacities of potential host and partner institutions

a) What approach would the USAID Missions recommend for initiating, coordinating, and structuring the Andean Center of Excellence?

- b) Which Andean teacher training institutions potentially have sufficient capacity to support a regional Center of Excellence providing teacher training to improve reading instruction?
- c) For each institution identified as a potential host institution, investigate the capacity to work regionally in each of the important areas listed below.
 - Reading instruction, including in a multilingual or indigenous context
 - Teacher training, including in-service teacher training
 - Providing follow-up to training (to move theory into practice)
 - Serving the target population of primary-grade teachers and school administrators in urban and rural poor communities, including in remote areas
 - Materials production, including screen, produce, and distribute materials
 - Distance learning
 - Performance diagnostic and assessment (related to reading and reading instruction)
 - Applying research toward improvement of teacher training

Questions to address in each area include:

- What are the specific experience, capacity, and interest of the institution to serve as a regional Center of Excellence?
- What is the quality of its programs?
- What is the vision and commitment of its leaders to innovative change?
- What is its credibility across the Andean region?
- What is its management capacity?
- What institutional capacities would need to be developed to create regional capacity?
- d) For each institution, what are areas of strength and/or excess capability in which the institution could potentially serve CETT?

III. Deliverables

A. Presentation of findings to CAII and USAID.

B. Written report (about 30 pages) that includes:

- a) Summary of the teacher training needs and capacities with regard to reading instruction in the Andean region, including the status of existing teacher training, to the extent available.
- b) Summary of country capacities relevant to establishing CETT, to the extent available.
- c) Discussion of the potential host and/or partner institutions for CETT, addressing strengths, capacities, areas that would need development, etc. (as described in the questions above), with institutions prioritized to identify the relative capacity to serve as a CETT.

d) List of meetings held

IV. Team Composition

Jennie Campos (Team Leader; Teacher Training Specialist) Angel Saltos (Education Generalist) Lillian Rose (Teacher Training Specialist) Barbara Hunt (Education Generalist)

Annexes to Scope of Work

III.C.1

The following areas of investigation are provided as further guidance in answering the above questions on teacher training needs, especially as relevant to reading instruction:

- 1. Teacher perception of training.
- 2. Teacher access to training.
- 3. School Administrator perception of teacher training.
- 4. Specific needs of teachers in more remote and disadvantaged communities.
- 5. Specific need of teachers in multilingual countries and communities.
- 6. Summary of key educational issues quality of teaching and learning, management of classroom resources, equity, access to secondary education, and finance.
- 7. Key teacher-related issues with respect to status, role in the community, recruitment, retention, teacher training, (pre-service and in-service) support services, incentives (especially for teaching in rural areas), and evaluation.
- 8. Agencies involved in teacher training by country (to include multilateral, government, non governmental, trade unions, private sector), and types of programs offered.
- 9. School-based teacher training, including a description of practices.
- 10. The national vision for teacher development and training, including policies, planning, career path frameworks, etc.
- 11. Overview of teacher training reforms within the past decade.
- 12. Summary of teacher training needs.
- 13. Teacher training institutions by country, student capacity, programs offered, and sponsorship of programs.
- 14. Innovative teaching practices at the primary level, particularly with respect to reading.

III.C.2

The following areas of investigation are provided as further guidance in answering the above questions on country capacity:

- 1. Socioeconomic data by country, including GDP per capita, school age population, unemployment levels, etc.
- 2. Formal school system description by country: current and projected number of children enrolled at primary and secondary levels, number of trained and untrained teachers, number of years in service, and level of teachers' formal academic education.

- 3. Delineation of the roles of the MOE, school administrators and inspectors, teachers' unions, external agencies to the university, and other institutions in terms of teacher training (including access mechanisms, funding, approaches, etc.).
- 4. Exploratory research related to the possibility of gaining long-term financial support for the project from the public and private sectors.
- 5. Investigation of the possibilities for forming Center of Excellence partnerships with public and private institutions.
- 6. Assessment of political will of host country leaders to support critical teaching reforms.

III.C.3

The following areas of investigation are provided as further guidance in answering the above questions on institutional capacity:

1. Capacity for research and innovation

- a) Commitment and interest of leaders and management to innovation, change, and the vision, needs, and changes that the Centers of Excellence represent; include examples, when available, of leadership's past commitment to change
- b) Capacity to innovate, institutionalize, and sustain pilot initiatives in teacher training

2. Organization

- a) Financial structure: sources of funds
- b) Personnel: numbers, categories, qualifications
- c) Existing regional outreach and possibilities of expansion
- c) Availability of private-sector funds and capacity to generate new agreements

3. Teacher Training Programs Offered

- a) Curricula for each program, duration of each, capacity per program, format, methodologies for training, and teaching/learning style promoted
- b) Accreditation of programs
- c) Evaluation of programs (summary of findings of latest available report)
- d) Accessibility to teachers and schools administrators within the target countries which the Center of Excellence is intended to serve
- e) Capacity for follow-up

4. Resources

- a) Available physical and material resources to support residential and distance learning (facilities, libraries, reading laboratories and resource centers, technology infrastructure including computers, internet capacity)
- b) Human resources in programs related to those of interest to CETT
- c) Dissemination of knowledge and research findings: publications, newsletters, radio, TV, audio or videocassettes

5. Population served

a) Population and areas served annually

- b) Profile of students trained/served: level of general education, urban/rural, gender
- c) Experience with serving target populations of primary-grade teachers and school administrators in disadvantaged communities

ANNEX B: WORK PLAN

1. PRINCIPAL OBJECTIVES

The principal objectives have been identified under the heading "Goals" in the Scope of Work (see Annex A).

2. RESEARCH METHODOLOGY

As described in the Scope of Work, two separate teams (Team 1 & 2) of two persons each will conduct the salient fieldwork in the Andean region.

2.1 Countries to Be Visited

Team 1: Bolivia and Peru

Team 2: Ecuador

2.2 Key Research Questions

The primary questions have been outlined under the heading "Key Questions and Issues to Consider" in the Scope of Work (see Annex A).

2.3 Data Sources

The following will serve as primary data sources for the Center of Excellence for Teacher Training:

- USAID
- Donors such as the World Bank, IDB, UNICEF, GTZ
- MOE Functionaries
- University Officials including President/*Rectores*, School of Education Deans or Directors of Education & other relevant functionaries
- Teacher Training Institutions
- Nongovernmental Organizations including networks or consortia
- Private-Sector Representatives, e.g., Peru 2021, consortium of businesses

2.4 Key Data Collection Techniques

- Interviews
- Informal meetings with a selected sampling of key personnel in the public and private sectors. These include, but are not limited to, USAID, MOE functionaries, university functionaries, and teachers' union officials.
- Visits to universities or teacher training institutions that are known to have and effectively use information communication technologies for distance education.

• School visits where necessary or appropriate.

3. DELIVERABLES

The deliverables have been identified under the heading "Deliverables" in the Scope of Work (see Annex A).

4. SUPERVISION

- The Team Leader, Jennie Campos, will be responsible for design, implementation, and production of the report. She will assume overall supervision of the sub-task order design, implementation, data analysis, presentation, and report writing.
- As BEPS/LAC Activity Coordinator, Ms. Antonieta Harwood is directly responsible for overall quality and performance of the Andean assessment team, liaison needs between USAID and the Team, and quality assurance of the final report.
- Dr. Don Graybill, BEPS Project Director, will provide general oversight support and quality monitoring of the sub-task order.
- David Evans is the designated LAC/EHR CTO for this sub-task

5. SCHEDULE OF ACTIVITIES

Activities	Dates
Team preparation & desktop	Jan 28 – Feb 1, 2002
research	
 Prepare work plan 	
 Arrange visits and interviews 	
Field visits to Bolivia & Ecuador	Feb 4 – 8
Field visits to Peru	Feb 11 – 15
Team Leader begins writing	Feb 11 – 15
Group analysis of data & writing	Feb 18 – 22
Debrief USAID	Feb 19
First Draft Report to CAII	March 8
First Draft Report to USAID	March 21
First Draft Report back from USAID	March 28
w/feedback	
Second Draft Report to USAID	April 8
Second Draft Report back from USAID	April 15
w/feedback	
Final Report to USAID	April 29

Assessment team preparation includes:

- Desktop research
- Prepare work plan
- Arrange visits and interviews
- Field visit to Bolvia & Peru

- Field visit to Ecuador
- Group Analysis of the data
- Prepare draft report
- Present draft report

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ANNEY C.
ANNEX C:
RESEARCH QUESTIONNAIRES USED IN COUNTRY VISITS

QUESTIONNAIRE FOR MINISTRY OF EDUCATION AND HIGH LEVEL AUTHORITIES

- 1. What initiatives are being developed regarding pre-service and in-service teacher training?
- 2. What are the existing options for in-service and pre-service training from the MOE and other institutions?
- 3. Is there any specific training for reading instruction?
- 4. Which are the teacher training programs supported by international donors? Are any of these programs specific for reading instruction?
- 5. What kind of support does the MOE provide to teachers attending training programs?
 - What kinds of stimuli?
 - Are travel expenses paid?
- 6. How could reading instruction training be improved?
- 7. What is the country's technological capacity?
- 8. Are there distance learning programs available?
- 9. Does the education system use technology? If so, what type?
- 10. What is your perception regarding children's problems associated with reading?
 - In rural areas?
 - In urban, marginalized areas?
- 11. How does the MOE approach specific training needs of rural, marginalized, and isolated areas?
- 12. What level of training do teachers have: none, normal schools, universities?

QUESTIONNAIRE FOR MINISTRY OF EDUCATION

(Minister, Vice-Minister or General Director)

- 1. What is your perception regarding children's problems associated with reading?
 - In rural areas?
 - In urban, marginalized areas?
- 2. What do you think should be the strategy to strengthen teachers' capacity to teach reading?
- 3. Which elements of the education system ought to be reinforced to strengthen reading instruction?
- 4. What programs does the MOE have in place to strengthen reading in schools?
- 5. What initiatives are being developed regarding pre-service and in-service teacher training?
- 6. What initiatives are being developed for supporting reading (libraries, free books, etc.)?
- 7. What kind of technological and multimedia capacities does the MOE have that could support distance learning programs? What are the MOE's plans in those areas?
- 8. Regarding the supply and demand for teachers, how many teachers are there, how many new teachers per year, how many leave the system?
- 9. What level of training do teachers have: none, normal schools, universities?
- 10. What are the existing options for in-service and pre-service training from the MOE and other institutions?
- 11. Is there any specific training for reading instruction?
- 12. What are the main teacher training institutions that depend on the MOE?
- 13. What institutions has the MOE contracted for training purposes and how successful has the experience been?
- 14. Who are the principal agents within the MOE in charge of pre-service and in-service teacher training?
- 15. Is there any kind of NGO and private sector participation in teacher training?
- 16. Which are the teacher training programs supported by international donors? Are any of these programs specific for reading instruction?

- 17. What kind of support does the MOE provide to teachers attending training programs?
 - What kinds of stimuli?
 - Are travel expenses paid?
- 18. How does the MOE approach specific training needs of rural, marginalized, and isolated areas?
- 19. How are equity issues approached (gender, socioeconomic)?
- 20. What percentage of the rural population has access to secondary education?
- 21. Are there incentives offered to teachers working in rural areas?
- 22. How do you evaluate teacher performance?
- 23. What kinds of reforms have been put in place for in-service training?
 - How effective have the reforms been?
 - Which population received reformed training?
- 24. How could reading instruction training be improved?
- 25. What is the country's technological capacity?
- 26. Are there distance learning programs available?
- 27. Do you use distance learning techniques? If so, how do you deliver them?
- 28. Does the education system use technology? If so, what type?
- 29. What are the contents of the programs?
- 30. Do you use computers, TV, radio?
- 31. How often do you use technology and how much do you depend on it?
 - Where does it come from, what does it teach, in what language was it written?
 - Does it have any teaching content?
- 32. Do technicians and educators get training to be able to use technology?
 - Do they have training materials?
 - Is technical assistance available?
 - Is the equipment reliable?
 - Do you have security problems to protect the equipment?
- 33. How many computers do you have available?
 - Which brand?

- Do you have teaching software to train teachers in reading instruction?
- Do you have a Web site?
- Do you have Internet access?
- How reliable is the Internet connection?
- Is the Internet costly?
- Is there a Web page for teacher training?

(To assess if they are not using Information Communications Technology [ICT], or if they are using ICT for training)

- 34. How do you think the use of technology could be improved? What would be its main purpose/priority?
- 35. What level of technology would be the most appropriate and effective for the country (e.g., access to teachers in remote areas, provide training at a national level, etc.)?

QUESTIONNAIRE FOR TEACHERS' UNIONS

- 1. What percentage of teachers is unionized?
- 2. Which are the best institutions for pre-service and in-service training for teachers in your opinion?
- 3. In your view, what are the strengths and weaknesses in reading instruction?
- 4. What is your policy towards in-service training?
- 5. How would you react to a center for in-service teacher training?
- 6. How could the union support the centers? How could unions contribute?
- 7. What view does the union have on in-service and pre-service training institutions?

QUESTIONNAIRE FOR TEACHERS

- 1. What are the main teaching methods in which you have received training?
- 2. What teacher training institution did you attend? Based on your experience, what were its strengths and weaknesses in reading instruction training? Which institution do you consider the best in your country regarding this matter?
- 3. How many times a month/year do you receive training?
- 4. What courses in reading instruction did you receive?
 - When was the last one?
 - What kind of incentive did you receive?
 - What methodologies were used to teach you how to teach reading?
- 5. What priorities strengthen your own capacity for teaching reading?
- 6. What priorities strengthen the faculty's capacity for teaching reading?
- 7. What do you think are the priorities for strengthening children's ability to read?
- 8. Do you use reading programs for children with English as a second language?
- 9. What programs exist for children with learning disabilities, attention deficit disorder, etc.?
- 10. Do you have enough programs available to teach reading?
- 11. Please describe how you teach reading:
 - What methods do you use?
 - What are your goals?
 - What materials do you use?
 - What resources do you have handy?
 - What obstacles do you encounter?
 - Overall, how has your experience been in reading instruction?
- 12. Do you regularly evaluate your students' progress? Please describe how you conduct those evaluations.
- 13. What materials do you use to teach reading from 1-3?
- 14. Which strategies do you use for engaging parents and the community in supporting reading instruction?
- 15. What kind of support is provided to you for participating in in-service training?
 - What incentive do you receive?

- Do you get a per diem?
- 16. How do you plan your classes (time for reading, math, etc.)?
- 17. What percentage of the time is invested in reading?
- 18. What percentage in reading instruction?
- 19. What training do you think principals and supervisors should have to help you improve your teaching of reading?
- 20. How would you like to use computers?
- 21. Did you receive training in computers?
 - Has it been sufficient for you?
 - What kinds of materials did they give you?
 - What kind of training would you find useful?
- 22. What kind of technology do you have access to and how often do you use it?
- 23. Do you have access to the Internet through your municipality?
- 24. Do you have access to TV, radio, etc?

QUESTIONNAIRE FOR THE PRIVATE SECTOR

- 1. Please give us your impression of the quality of your country's education.
- 2. What is the private sector's current participation in education?
- 3. What would motivate a company to participate in strengthening education?
- 4. What is your opinion of the Centers of Excellence's concept?
- 5. How could the private sector participate in the project?

QUESTIONNAIRE FOR USAID MISSIONS

- 1. Purpose and objective of the fieldwork:
 - Initial institutional analysis of potential hosts for the Centers of Excellence
 - Assessment of needs, supply, and demand of training for teachers
 - Discussions with key school actors (administrators, principal, teachers, students)
- 2. Which educational institutions are funded by USAID? How are their programs performing?
- 3. What is USAID's perception of the MOE?
- 4. Which are the stronger NGOs focused on education and particularly on reading training for teachers?
- 5. Does the Mission know of any initiatives in the private sector that support education (i.e., foundations, American companies that might be interested in supporting such a project, etc.)
- 6. Who are the main donors in education? Where are they, what are they doing, how much are they investing?
- 7. What is the Mission's perspective on the Centers of Excellence? How could the country participate in the initiative? Which country's needs could the Center address?
- 8. What is the country's technological capacity, especially in terms of distance education?

QUESTIONNAIRE FOR NGOS

- 1. How do you perceive the state of reading instruction in the country? Is it problematic?
- 2. What kinds of local research have been done regarding student performance in reading?
- 3. Within the context of local education problems, how important is teacher training in reading?
- 4. How much experience do teacher training institutions have in teaching how to teach reading, including aspects such as bilinguism and indigenous languages?

Perceptions and suggestions for the CETT:

- 1. How do you perceive the CETT initiative?
- 2. What is your recommended strategy for starting a CETT in the Andean region?
- 3. What level of credibility do regional institutions have?
- 4. How do you think other institutions could participate in the project?
- 5. Which are the key stakeholders in the region? Who has leadership? How much political support could CETT have?
- 6. What organizational model could allow for the project to (a)start small and (b)grow to be self-sustainable?
- 7. What could be the strategy for involving the private sector and NGOs in supporting CETT?

QUESTIONNAIRE FOR ADMINISTRATORS (PRINCIPALS AND SUPERVISORS)

- 1. How would you assess the level of training of new teachers arriving at your school each year?
- 2. What are your priorities to improve the teachers' ability to teach reading?
- 3. How many yearly training sessions do you hold?
- 4. What is your perception of the students' reading achievement in early grades?
- 5. In general, would you say that teachers do a good job in teaching children reading?
- 6. Do you have specific programs to train primary teachers to teach reading?
- 7. What are they?
- 8. Do you have a specialist to train teachers in reading instruction?
- 9. Is so, how do you deliver this training?
- 10. Is there a dialogue between teachers and school administrators on pedagogical needs?
- 11. What are your training programs?
- 12. Do administrators listen to those needs and provide the appropriate training?
- 13. How do you involve parents and the community to support the children's learning process and, in particular, reading?
- 14. Are there venues in the school system to support the community in this effort?
- 15. What are the priorities in improving the children's ability to read?
- 16. Are there any remedial programs for learning disabilities, attention deficit disorder, dyslexia, etc.?
- 17. How often during the year is reading ability measured?
- 18. At what grades?
- 19. How is it measured?

- 20. What would your priorities be to improve the teachers' ability to teach reading?
- 21. What percentage of time is dedicated to reading?
- 22. What incentives are in place for teachers to improve their ability to teach reading?
- 23. What advantages are provided for teachers to attend training programs?
- 24. How do you encourage them?
- 25. Are travel expenses/per diem paid for?
- 26. Is there any research done regarding the need for training to improve teachers' ability to teach reading?
- 27. Who conducted it?
- 28. When was it done?
- 29. What kind of training would principals/supervisors need in order to support teachers in strengthening their teaching ability in reading?

QUESTIONNAIRE FOR TRAINING INSTITUTIONS

1. Pre-service training

- a. What geographical areas do you cover?
- b. What pre-service and in-service training experience do you have?
- c. How do you implement your programs?
- d. What kind of teaching practices do you follow in your institution?
- e. How do you follow them?
- f. What are the requirements for getting a certificate/degree?
- g. What kind of experience does the institution have in teaching reading, including aspects such as bilingualism and indigenous languages?
- h. What is the curricula, teaching methodology, content, texts, and other resources used? Is there a focus on quality, strengths and weaknesses?
- i. How many students/graduates are there in Basic Education?
- j. Do you have specific classes on reading and reading specialists?
- k. What kind of background do the specialists have?
- 1. What is the content of the reading classes?
- m. Do you have a master's program in reading?
- n. What types of degrees do you offer?
- o. Are there program evaluations (reports)?
- p. How would you describe the strengths and weaknesses of reading programs?
- q. What kind of research has been done locally on the reading performance of students?
- r. In what ways does your institution support methodology changes and advances on the area of reading?
- s. In your opinion, which are the priorities in relation to reading improvement?
- t. What is access like for teachers and administrators in the beneficiary countries?
- u. Is there any follow-up capacity?

2. In-service training

- a. What incentives do you offer for training?
- b. Which is your target population?
- c. What is the frequency, duration, and type of training you offer?
- d. How do you implement follow-up at the classroom level?
- e. Who evaluates the training you provide?
- f. What training do you provide on reading?

3. Research and Innovation Capacity

a. What are the leaders and administration's commitment and interest towards innovation, change, vision, and needs represented by the CETT?

b. Is there capacity to innovate, institutionalize, and sustain teacher training pilot initiatives?

4. Organizational Considerations

- a. Sources and funds, overhead, organization, type of institution
- b. Financial stability
- c. Relationship with donors and MOE
- d. Personnel's level of education
- e. Possibilities of expansion and collaboration with NGOs
- f. Availability and of private sector's funds and capacity for attracting future funding
- g. Human resources available in programs related to CETT's interests
- h. Annual Report, organigram, financial statements

5. ICT and other resources/Technology

- a. Dissemination of knowledge and research conclusions: publications, bulletins, radio programs, TV, audio, and videocassettes
- b. Available infrastructure for in-house and distance education (libraries, reading labs, resource centers, equipment such as software and hardware, internet capacity, etc.)
- c. Experience with teaching technology using distance leaning
- d. Satellite dish/pipe/broadband; capacity to run a Web site, broadcast TV; other was to deliver distance education.

6. Targeted population

- a. profile of on-campus and potential student population: general level of education, rural/urban, gender
- b. In-service experience with teachers and administrators in disadvantaged communities

7. Perceptions and suggestions for the CETT

- a. How do you perceive the CETT initiative?
- b. What strategy would you recommend for starting the Andean CETT?
- c. Which could be the role and strategy for distance learning in CETT, using ICT and other technologies to create materials and provide training in isolated communities?
- d. How would you incorporate other institutions, those with no direct responsibility, in the CETT?
- e. What level of interest in institutional collaboration would you predict from all parties?
- f. What organizational model could allow for the project to (a)start small and (b)grow to be self-sustainable?
- g. What specific experience or specific capacity does the institution have to offer to CETT?

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ANNEX D: LIST OF CONTACTS

LIST OF CONTACTS

Ecuador

USAID

Lars Claussen Mission Director

Ken Farr **Deputy Mission Director**

Ministry of Education and Culture

Gabriel Pazmino Armijios Sub secretary of Education

Carlos Paladines Advisor to the Minister of Education

DINEIB (Dirección Nacional de Educación Intercultural Bilingüe)

(National Directorate of Intercultural Bilingual Education)

Dr. Luis Montaluisa

Director

Mariano Morocho Technical Director

DINAMEP (Dirección Nacional de Capacitación y Mejoramiento Profesional)

(National Directorate of Professional Teacher Training)

Alfonso Aguirre

Director

Vicente Bazantes

Division Chief

Dr. Judith Duran

Advisor

CENAISE (Centro Nacional de Investigaciones Sociales y Educativas)

(National Center for Social and Education Research)

UNE (Unión Nacional de Educadores)

Magaly Robalino Executive Director

UTPL (Universidad Técnica Particular De Loja)

Dr. Jose Barbosa Corbacho Central Regional Director/Quito

Distrito Metropolitano de Quito

Augusto Abendano Director of Municipal Education

IDB (Inter-American Development Bank)

Baudouin Duquesne Social Development Specialist

World Bank

Evelyn Pesantez Education Consultant

UASB (Universidad Andina Simón Bolívar)

Dr. Enrique Ayala Mora, Rector

Dr. Catherine Walsh, Coordinator of Intercultural Studies

Instituto Pedagógico Manuela Canizares

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Dr. Claudio Monsalve M Executive Director

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Pablo Pinto Director

FLOM (Fundación Leonidas Ortega Moreira)

Ana Julia Hollis Director

MICROSOFT Corporation/Ecuador

Federico Andrade Government Development Manager

Bolivia

Ginger Quiroga Bolivian First Lady

US Embassy

Ambassador Rocha

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Liliana Ayalde, Mission Director

Ted Gehr

Deputy Program Office, Office of Strategy & Operations Services

Sonia Anibar

Deputy Program Office

Beatriz, S. O'Brien

Deputy Executive Officer

Barbara Belding

Environment Officer

Ministry of Education

Adriana Anaya Minister Mariana Villareal Chief of Training Unit

World Bank

Patricia Alvarez Education Program Coordinator

CBIAE (Centro Boliviano de Investigación y Acción Educativa)

Noel Aguirre Director

USFA (Universidad San Francisco de Asis)

Jeni Stover President

Hugo Salamanca Systems Engineer

Colegio Internacional del Sur

Janet Medrano Director Primary and Superior Education

Tatiana Fernández Arts Professor

José Luis Aliaga Philosophy Professor

David Luna Math Teacher

Universidad de Aquino Bolivia

Esmeralda Capri Academic Director

Cyntia Rivera Pedagogic Director

UN (Universidad Núr)

Eloy Anello President

CEMSE (Centro de Multiservicios Educativos)

Antonio Arandia Director

Sindicato de Maestros

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Ministry of Education

Nicolas Lynch Gamero Minister

Blanca Encinas Fernández National Director Primary Education

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TAREA

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Nélida Césped Magazine Director

Peru 2021

Henry Day President

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Ricardo Cuenca Principal Technical Advisor

GRADE

Patricia McLaughlin de Arregui Consultant

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Marcia Paredes Director

Fe y Alegría

Juan Cuquerella National Director

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ANNEX E: COUNTRY REPORTS

PERU COUNTRY ASSESSMENT

General Context

The 2001 election of Alejandro Toledo, who was born in the small town of Ancash in the Callejon de Huaylas, as president of Peru was a significant event in a country in which indigenous populations have had difficulty integrating socially and politically. This new administration has emphasized reaching out to the rural poor, offering this marginalized group the opportunity to bridge longstanding differences. President Toledo has referred to the need to improve the education system in Peru and his administration's Plan Huascarán intends to bring the latest technology and Internet access to rural schools.

The current administration follows a long history of education reform in Peru, marked by a series of administrations hampered socially, politically, and economically. With 19 different ministers of education from 1980 to 1999, lack of continuity has led to uneven and poorly executed reforms. Three presidents (Fernando Belaunde, 1980-1985; Alan García, 1985-1990; and Alberto Fujimori, 1990-2001) governed during the period of the PPE (Proyecto Principal de Educación para América Latina y el Caribe, 1979). The PPE was launched with a vision of regional integration. The main objective was to provide access to a minimum of eight to ten years of education for all children. Another goal was to eliminate illiteracy before the end of the century and expand educational services to adults. In so doing, the government committed to improve quality and efficiency of the education system through necessary reforms.

One of the reform efforts that brought heavy criticism from education analysts was the reduction of primary grades to six years of study instead of the nine years previously designated. Categorizing the first nine years of schooling as primary school had resulted in parents' keeping their children in school for nine years instead of six.

When Alan García became president in the mid-1980s his administration attempted to reverse the above change by defining elementary education as ten years, including kindergarten. García's plan, Education for Life, emphasized quality education and introduced several initiatives, such as making literacy a priority and providing access to education for all. In seeking to make the community more a part of the education of its citizens, the government also pushed for local control of primary education. But, the municipalities did not adhere to this request and the idea failed.

Between 1986 and 1990, the National Plan for Development attempted to adjust the rural calendar so that the agricultural sector could adhere to the educational calendar. There was also a new focus to recapture appropriate technologies best suited to rural students. Programs like PRONOEI, with distance education, reached out to the nonformal arena, bringing parents and educational promoters together to work for the development of their children at the preschool level.

Alberto Fujimori's government took over in 1990 with a call for education to modernize. This administration's objective was to expand and improve on what had been done towards quality education. The education budget was reorganized to take into account teacher salaries and the use of new technologies.

The Constitution of 1993 advanced education reform by introducing more modern concepts about the role of education in society. Preschool, primary, and secondary education became mandatory. The reform promoted private schools for profit and then taxed them. It also outlined parental rights to intervene in their children's education and promoted active parental participation in the educational lives of their children. The Constitution of 1993 encouraged the media to help in the moral development of the population through information dissemination.

From 1990 to 1995, educational policies supported private schools and quality in public schools. The curriculum was revised, new educational materials were developed, and classrooms were furnished with small libraries. These were distributed throughout preschools, elementary schools, and teacher training institutes.

Teaching as a profession was reassessed. A new salary policy was instituted based on merit (teachers today earn \$100/month) to motivate teachers to strive for excellent performance. This move called for the training of teachers and administrators, done by both private and public agencies.

By 1997, a new reform came about in the educational system. This reform integrated preschool as one of the primary grades. Class time was taken away from the secondary grades, making them four years instead of five. High school diplomas were then awarded after two years of study.

Even though great strides were made in education during all of these years, the economy and political strife pressured educational development with two antagonistic forces: the constant public cry for a better education and the insufficient resources to provide one. Fernando Belaunde left office with a recession of 100 percent, and Alan García's government was unable to address regional problems and mismanaged the country's economy. Inflation had grown to 3000 percent and Peru was declared ineligible for international credit.

Increasing terrorist activity began to paralyze the country. The teachers' union, SUTEP, became increasingly politicized. An extraordinary drop in teachers' salaries, in combination with the years of terrorism often focused on schools, caused the departure of many certified, experienced teachers from the schools (Hunt, Latin American Studies Association (LASA) paper, 2001, pg.7). While 81.6 percent of teachers held certification in 1970, less than half held certification in 1990 (Ministerio de Educación, 1993, p. 36). Some of these uncertified teachers had only a high-school education. Prestige of teachers dropped and morale was low. The percentage of teachers with certification has risen to 62 percent currently (Wu, 1999, p. 47), although the number of uncertified teachers is disproportionately higher in rural areas than in urban schools (Hunt, LASA, pg.15).

Education's share of the central government's budget has been about 15 percent in recent years. A recent World Bank study (Wu, 1999) points out that Peru is noteworthy for educating so many children at such a low cost. Indeed, the percentage of GDP allocated for education in Peru is only 3.0 percent, well below the average of 4.6 percent in Latin America and 5.1 percent for developed countries (Hunt, LASA, pg. 18).

A recommendation by the education document, *Carta de Navegación*, suggests a greater share of government funds should be allocated for education. Education's share of the GDP will be increased to 4 percent in 2002, 5 percent in 2003, and from 2004 on, the budget will increase incrementally by 0.5 percent annually to reach 6.5 percent in 2006. The *Carta de Navegación* points out that this budget strengthening for education could be done by spending less on the military and by reprogramming some foreign debt (Hunt, LASA, pg. 23).

But, all in all, according to *Una Mirada a la Educación en el Perú, 2001* (A Look at Education in Peru, 2001) published by TAREA, there has been progress towards accomplishing some of the goals of the PPE, as follows: 71 percent of the population ages 6 to 24 years of age attends school; gender does not affect access to preschool or primary school; and the national average of completed grades is steadily increasing: 3.7 in 1972, 5 in 1981, 6.7 in 1990, and 8.4 in 1991.

Perceptions of Educational Quality

Quality of education as a government strategy gained importance beginning in the 1980s, but the road to quality has been very circuitous and uneven. The MOE established quality improvements in short bursts at different targets. In the 1990s, the entire education system was to make quality education integral to its functioning.

Curriculum has been a main area of reform in the past three governments, although constant change and modifications never allowed for innovations to take hold. Generally, a positive aspect has been the move away from curriculum based on objectives to one based on competencies. Curricular changes required that teachers make appropriate adjustments in their classrooms, but many lacked the practical knowledge or experience to do so.

Instructional time has diminished as well. Three teachers interviewed suggested that the reduction in class time was due to a reduction in the length of the school day (a day is divided into morning classes and afternoon classes). The move to shorter days was intended to be temporary, but has become permanent. This reduction of the length of the school day, coupled with a reduction in the number of school days due to holidays, administrative interruptions, and recesses, leaves children less time for learning.

Leading educators and educational researchers who participated in a conference of CIES (Consortium for Educational Development Research/Nuevos Conocimientos para la Actual Política Educativa) expressed concern about the lack of serious educational

research and testing. It was suggested that the MOE publish results of studies and document best practices so that this analysis of what is working in the classroom can be applied to educational development and the improvement of classroom performance of teachers.

According to the MOE, there are 279,000 public teachers and of those only 250,000 have tenure. The oversupply of teachers includes many who are ill prepared, some due to low-quality ISP programs. The MOE's initiative to improve teacher knowledge of concepts and methodologies with PLANCAD, a nationwide teacher training project, has been a successful first step. Plans are in motion to continue permanent in-service training and revise and improve pre-service training.

Summary

After 20 years of educational reform, significant problems persist: Primary education is all that is available in the rural areas. In-service teachers still need more preparation if they are expected to make curricular adjustments or use new methodologies efficiently. The school calendar is still inappropriate concerning the agricultural sector since it does not adapt itself to planting and harvesting cycles or regional holiday cycles. The MOE has found in its study of rural school days that students attend school on an average only 128 days a year (MECEP, 2001). Students who have to leave school to go to work do not have extension programs available.

The curriculum remains far from satisfying the cultural and linguistic needs of the population, which disproportionately affects children whose maternal tongue is not Spanish. Rural areas still lag behind urban areas, with the rate of failure 86 percent higher among rural students than urban students. Rural girls and women, especially among indigenous groups, are still the primary victims of isolation from school. Among adolescents that do not know how to read, 64 percent are young women.

Teacher Training and Reading Instruction

It is generally agreed that teacher training deficiencies are strong contributors to underachievement in Peru. Although the just-completed, five-year World Bank project MECEP provided teacher training to almost all elementary teachers through PLANCAD, this was only a first step towards improvement. Teachers still need much more training, particularly in the area of early reading instruction. The program encouraged teachers to use participative methodologies that would involve children actively in their own learning, a significant change from the former emphasis on dictation, copying, and rote learning. Many teachers have only begun to change their approaches and practices; they need ongoing classroom support and supervision.

Pre-service Teacher Training

Universities and ISPs offer pre-service teacher training in Peru. There are 28 public universities, most of which offer pre-service education programs, and 45 private universities, of which about 26 have education programs. All pre-service training is for students who have completed secondary school. Students at ISPs attend for four years and receive a technical certificate, but do not earn a university degree. Students in university pre-service programs attend for five years to earn a bachelor's degree.

About 54 universities have pre-service education programs, which are developed by each institution and operate independently from the MOE. ISPs operate under the jurisdiction of the MOE and use the official MOE teacher training curriculum, which was recently reformed after a series of pilot programs. There has been an extraordinary proliferation of ISPs in Peru in recent years; there are now 472 ISPs, about 60 percent of them public. As a result, many thousands of students are graduating each year that cannot find jobs as teachers. MOE personnel estimate that the number of teaching graduates is nine to ten times the number actually needed and that about 81 ISPs would meet the actual need for teachers.

In addition, the quality in most of these programs is low. In order to raise standards and reduce the number of ISPs, the MOE is developing a system of accreditation. The creation of specific standards will force those institutions that do not meet the standards to close. In addition, some of the public ISPs are to be converted into centers for inservice teacher training.

There are no specialties or master's degrees in reading offered in Peru, although elementary education training programs do offer "integrated communication" courses, which include reading.

In-service Teacher Training

The MOE contracted with universities, NGOs, ISPs, and associations of teachers throughout the country to provide the designated training under the PLANCAD project. Many of these institutions became aware of current teaching methodologies and were strengthened by their association with this program. Trainers were required to give follow-up assistance in trainees' classrooms and experienced firsthand the problems in their local schools. The MOE is now developing a plan for "continuous" teacher training in which approved training would be offered by a similar network of contracted institutions. Teachers would pay for this training themselves; however, the plan proposes to provide increments in the pay scale based on additional training or degrees.

Peruvian teachers see quality in-service training as an urgent need and are extraordinarily eager to receive in-service training, even when they must pay for it themselves from their meager salaries. Many experienced teachers in Peru left the system during the difficult period during the 1980s. Therefore, many of the current teachers are young and inexperienced. Most of them received quite inadequate education themselves. The specific training needs are those mentioned above: specific methodologies to teach

reading and writing, attention to reading comprehension, and instruments and methods for ongoing classroom evaluation to be used in personalized instruction.

Specific Training Needs

Disadvantaged Communities

There are two major disadvantaged groups in Peruvian education: poor, periurban and rural populations. In general, the remote, rural population is the most deprived of resources, materials, and trained teachers. Out of 21,867 elementary schools in Peru, 11,841 are multigrade, in which two or three teachers each have more than one grade in a classroom, and 8,106 are one-room schools taught by a single teacher. Teachers in remote areas are the most likely to lack certification, as it is difficult to attract teachers from the cities to these areas. Recognizing that the World Bank project MECEP did not succeed in reaching many rural areas, a new large-scale project is in the works that will focus especially on rural needs. The plans include development of rural networks of schools and ungraded classrooms in which students move at their own pace, as many rural students miss school frequently, fall behind, and repeatedly fail grades before eventually dropping out. Ungraded classrooms need special curricula and teaching methodologies, as well as methods for effectively teaching reading in such situations.

Bilingual/Intercultural Education

In Peru, the first language of 17.7 percent of the population is a language other than Spanish. Much of the population in the mountainous areas of Peru speaks Quechua or Aymara; in addition there are at least 38 other languages spoken in the Amazon rain forest. An additional complication in Peru, in contrast to Bolivia, is that several different dialects of Quechua are spoken, making it more difficult to develop printed materials that all groups find acceptable. Bilingual, intercultural programs have waxed and waned over the years in Peru, generally following political trends. However, at this time, the MOE is quite committed to providing such programs. Five ISPs in poor Andean departments of Peru have been designated to train teachers to work in bilingual, intercultural programs. MOE staff suggested that one or more of these ISPs might provide an excellent target population for work by the Andean CETT. These ISPs are in Huanta, Huamanga, Huancavelica, Andahuaylas, and Tinta.

Students with Special Needs

There are special schools in Peru for children with extreme special needs, but in typical public schools no special assistance is provided to children with learning problems. A few schools have psychologists who may assess or work with some children, but this is far from the norm.

Evaluation

With the support of the World Bank project MECEP, the MOE developed its first national testing system, CRECER. The test was initiated in grade 4 in 1996, assessing reading, mathematics, and samples of student writing. Subsequent testing was done in grades 4 and 6 in 1998. CRECER included assessments in Quechua and Aymara in 2001 for the first time. The test is done on a sample of schools, so it cannot be used to assess individual children or schools; however, a useful baseline of data is being developed. The MOE has published an excellent series of reports on factors that contribute to achievement on the tests, using data from questionnaires administered during the testing process.

Peru has recently permitted the publishing of its scores on the UNESCO third and fourth grade reading and math tests. On these tests, given in 1997, Peru scored near last among the 13 countries assessed in reading. What was most noticeable about the Peruvian scores, however, was the diversity. Peruvian third graders from large cities scored in sixth place on the language test, whereas those from rural areas were in last place.

Although various organizations or individual teachers have informal tests they use to measure progress, there is a need in Peru for valid and reliable measures of student progress in reading, and most particularly for diagnostic instruments teachers can use in class to help them plan instruction to meet individual needs.

Resources

During the early 1990s, no textbooks or materials were provided in Peruvian schools. Now the MOE does provide textbook/workbook combinations in grades 1 through 6, as well as sets of teaching materials such as math manipulatives and small classroom libraries. Although these are intended for all public schools, distribution problems are enormous, and materials often arrive late, sometimes not reaching remote rural schools at all. Although some schools occasionally have very small libraries, these often consist of a few shelves of random selections of outdated texts, with very few attractive children's books. Communities rarely have libraries, and many rural areas are completely devoid of printed material.

Modern technology is rapidly becoming available in many parts of the country, and the new president has made the Plan Huascarán a centerpiece of his initiatives. This project is expected to provide computers to many schools, primary as well as secondary, and will also train teachers in computer use. Although there are no specific plans to use these computers for teacher training, this possibility could be explored. Many primary schools participate in a project called *infoescuela*, which provides a classroom of computers, along with activities using Lego blocks. The computers used in these programs are rapidly becoming quite outdated. Computers are not used in the public schools for the teaching of reading.

There are several universities that emphasize technology, such as the Universidad San Ignacio de Loyola, which has an extensive network of state-of-the-art teleconferencing equipment. Most universities have Web sites and facilities for teleconferencing.

Distance learning programs in education frequently use the Internet. However, many remote rural areas are still lacking in electricity, and the digital divide is a continuing phenomenon in Peru.

Best Practices

PIEDI, the Project for Educational Innovations in the District of La Independencia, was started six years ago by five NGOs in Lima and UPCH with funding from the private sector. The project has provided an integrated program of reforms in an effort to assist three schools in the very poor area near the university. It was hoped that this effort could provide a model that could later be replicated in other parts of the country. The project included work with principals on efficient and democratic administration, teacher training with extensive in-class support and supervision, and the provision of health and dental services to children. The project received a grant from IDB for its last two years. Preand post-testing done each year in the project are now showing gains in reading and writing in many grades. It is of particular interest that statistically significant differences between the project group and a control school have only begun to show up in the last two years of the project. The lesson learned is that substantial investments of time and support to teachers have resulted in student gains, but that teacher improvement really does take time. Teachers have also benefited from peer observations and regular gradelevel meetings to discuss their teaching and receive support.

Many NGOs (e.g., TAREA, Fe y Alegría, CIDE) participated in the PLANCAD teacher training program. Some of these, such as Pukllasunchis in Cuzco, and ISP Iquitos have developed excellent teacher training programs, and have worked extensively with indigenous groups. TAREA, an NGO in Lima, has published many excellent teaching materials, including a series of textbooks and some materials especially on the teaching of reading. (See Country Capacity section for more information on NGOs.)

UNICEF has done extensive work on the articulation of preschool and first grade programs. In the process, it has developed considerable expertise on the early teaching of reading.

The Instituto Pedagógico Nacional Monterrico (IPNM) has a laboratory school in which students can observe excellent practices as part of their student teaching experience. In addition, the institute has been engaged the innovative Project PenTAREA, which works with six- to eight-year-olds in a poor school in the southern cone of Lima. One of the goals of that project includes improvement of reading skills. In a project with a prominent Lima newspaper *El Comercio*, IPNM has also trained teachers in how to use newspapers in classrooms.

INSTITUTIONAL PROFILES

Universidad Peruana Cayetano Heredia (UPCH)

The following information serves to supplement the section on UPCH found in Chapter II of the main assessment report.

Capacity for Research and Innovation

The education department of UPCH has shown an outstanding commitment to research and innovation. Placing a high emphasis on quality teaching, the department began to train professors in other departments in the university in effective pedagogical techniques.

The university is in a consortium with three other universities in Peru, including the PUCP, to provide distance education courses. UPCH led the planning and development of this distance education project, with funding from UNESCO and PNUD. UPCH has developed distance education courses in almost every region in the country, developing materials and systems that include tutorials, learning groups for the student and use of the Internet, even in remote areas of the country. The Education Department is currently planning a research project to evaluate the effectiveness of different distance education models.

In a particularly innovative project, UPCH joined with five leading NGOs in Lima (Fe y Alegría, CIDE, TAREA, KALLPA, and EDUCALTER) to initiate a six-year project of school improvement in three schools in the district of La Independencia, an extremely poor urban district near the university. This project, PIEDI, received assistance from Peru 2021, a group of businessmen affiliated with CONFIEP. Through this group, financing was secured for two years from the business CARSA ORION. In its later years, the project received a grant from IDB, with a donation provided by the Japanese government. (See Best Practices section above for project description.)

Education Department staff is actively involved in policymaking in Peru. The head of the department, Manuel Bello, was the lead author of the *Carta de Navegación* document that provides recommendations in education for the incoming government. He recently was the keynote speaker at a CIES conference of leading educational researchers in Peru where he presented an agenda for needed educational research. In addition, he has been working with the MOE on a new system of accreditation for teacher training institutions.

Key among the department's goals is an emphasis on continued learning through ongoing, practical research. A Ford Foundation-sponsored international conference in October, 2001 on the theme of "Learning Institutions" exemplified this emphasis: the idea that all individuals in an organization must keep learning in order to maintain a climate of inquiry and continued research.

Organization

The university has approximately 5000 students, 2800 undergraduates, and 2200 in graduate programs. There are eight departments: medicine, sciences and philosophy,

public health, dentistry, nursing, veterinary studies, psychology, and education. There is also the graduate school, which offers master's and doctoral degrees.

The Dean of the Education Department is responsible to the Faculty Council (*Consejo de Facultad*). The organizational chart provided by the department indicates that the departmental subdivisions (*direcciones*) include one specifically dedicated to research and one for continuing education. Other units in the department include a special unit for producing educational materials as well as a commission on self-evaluation.

Pre-service Teacher Training Programs

Since Peruvian universities and ISPs are already graduating nine to ten times more teachers than needed, more pre-service programs are not required at this time in Peru. For this reason, UPCH does not provide pre-service training; instead, the university has chosen to focus exclusively on in-service programs, including graduate training for teachers, because so many of the teachers in the system are very young and likely to remain in the system for many years. The university feels that these existing teachers were so poorly trained that the upgrading of their skills is the greatest need in Peruvian education

In-service Teacher Training Programs

UPCH is notable for the variety and quality of its in-service offerings. It participated actively in the MOE's PLANCAD teacher training program, providing in-service training in the primary grades in several poor areas of greater Lima. When UPCH was again contracted by the MOE to provide PLANCAD in-service at the secondary level, the department was awarded a separate contract from the MOE to design 32 self-teaching modules designed to assist secondary teachers to become up-to-date in their fields.

UPCH also participated in the MOE's National Plan for Training in Educational Management program, which provided in-service training for principals and other educational administrators. In this program UPCH trained 530 school principals from Callao, Lima, Huaral, Abancay, Puno, Juliaca, Juli Sicuani, and Cuzco, as well as 150 regional specialists from Cajamarca, Lambayeque, and Junín.

In 1997, UPCH developed a training of trainers program for NGOs and ISPs in Lima, Tinta (Cuzco), and Piura as part of a USAID-sponsored democratic participation project. The university has participated in a number of other special training projects, funded by the Swiss government and Save the Children, among others. These include several projects to provide in-service to teachers in public schools in the northern section of Lima, in cooperation with the NGO DESCO (Centro de Estudios y Promoción del Desarrollo), and in Juliaca with the Spanish NGO CPUR (Centro de Promoción Urbano Rural). In addition, UPCH was asked to provide pedagogical assistance in anti-drug education to the School of the Andean Community, under the sponsorship of the OAS and the American Embassy.

Ongoing program offerings in the department include:

The Programa de Complementación Académica offers a degree to practicing teachers who graduated from an ISP. Since ISP programs provide graduates with a teaching certificate but no degree, they may attend UPCH for two semesters to receive a bachelor's degree, or *Bachillerato en Educación*. This program was initiated through a distance education program with the ISP La Salle in Urubamba (Cuzco) and has been offered in Juliaca (Puno), Chupaca (Junín), Tama, Jaen (Cajamarca), Arequipa, and Iquitos, as well as in Lima. The program has served over 1200 participants since its inception in 1998. The Education Department has developed a set of modules for this program; one is devoted to self-study techniques and strategies.

The *Licenciatura en Educación* serves two groups, university graduates with a bachelor's degree in education and graduates in fields other than education teaching in basic education or intending to move into education. This program is offered at present only in Lima, in a mixture of distance and on-site education. It takes seven months for those whose initial degree was in education, and one year for others. In January 2002, the program had 50 participants and 80 graduates, 31 of which have received teaching certificates

It also offers a master's degree in education with a mention in teaching and research in higher education. This program is directed at those educators who wish to teach in university education departments or ISPs. Offered in a mixture of distance and on-site education, this program has 472 participants from Sicuani, Cuzco, Juliaca, Chupaca, Trujillo, Jaen, as well as four recently added sites in Iquitos, Arequipa, and Tarma.

The Education Department also strives to improve teaching in its own university by offering courses on how to teach effectively to professors in other university departments. These courses have been extremely well received in the university and are in great demand.

ICT and other Resources or Technologies

The university has the full array of technology for all types of distance education. At present, most of their distance education courses use the Internet. University staff mentioned that most of their students in remote areas are now using Internet to communicate with their tutors and with each other, although some students come from areas so remote that they do not even have access to a radio. UPCH maintains a Web site and has a satellite dish, facilities for teleconferencing, and excellent library facilities.

Population Served

The Education Department has made a concerted effort to reach the target population of CETT: teachers in poor, periurban and remote, rural areas. The department makes special efforts to accommodate teachers who sometimes live three or four hours' distance from a teaching site, assisting them in forming learning groups. Local tutors are often

hired, and sometimes the teachers themselves pay to have the tutor come to them so that they will not have to travel. The university can hardly keep up with the demand by teachers and ISPs in remote areas of the country for innovative distance education programs. One of the modules prepared and used by the department in its courses is on teaching Spanish as a second language, while another focuses on intercultural awareness (*interculturalidad*,), an important theme in all of its programs. The department does not offer at present any courses specifically on bilingual education.

Pontificia Universidad Católica del Perú (PUCP)

The following information serves to supplement the section on PUCP found in Chapter II of the main assessment report.

Capacity for Research and Innovation

The university has contributed to the development of education in the country by being a part of the national forum on education. In 2000, faculty members were involved in the "VI Analysis Workshop on the Peruvian Educational Perspectives". They were also part of "Proposals for Quality and Equity in Peruvian Education" and "The National Colloquium of Students and Faculty in Education".

Among its innovations is the launching of new courses and a specialty in education, such as the *licenciatura* in education for development. The objective of this degree is to prepare education professionals in proposal writing for development projects, particularly on adult needs in education more so than the standard school environment. Many professors of other disciplines, working in several NGOs participate as trainers and consultants.

The university also supports and motivates student participation in fairs, such as the fair EDUCARTE, where students and faculty have the opportunity to show and sell educational materials that they have developed, and a book fair, where students view new books and participate in discussions.

In research, PUCP has a membership in eight centers of research, six institutes of research, and four groups of research. The Department of Academic Research or DAI (Dirección Académica de Investigación) coordinates research work at the university.

As members of the Girls' Network, PUCP hosted the II National Conference for Girls Education in Rural Areas. The conference raised awareness about the problems girls in rural areas face and proposed a national action agenda. This agenda emphasized the need for student teachers to understand the problems of equity and gender and to promote sound, informed pre-professional practices in rural areas regarding these issues, which could be incorporated as best practices in elementary education locally and nationally.

Organization

The organization of PUCP is, according to Peruvian law, an institutional government made up of professors, students, graduates, the University Assembly, and the University Council of Departments. The University Assembly is two-thirds elected regular professors of different categories and one-third students. The members of the University Assembly elect the rector, and all the vice rectors of the various departments. These officials, along with department heads and student group leaders, form the entire Assembly and University Council. In this manner, the university is able to maintain a government that is by and for the university community, with students, faculty, and administrators participating in the education and research objectives of the institution.

According to its 2000 annual report, the university participated in 24 international agreements. One of these agreements was with Bolivia and Ecuador, called CODECAL. In Bolivia, PUCP is connected with the INS Universidad San Simón, in Cochabamba, Universidad Nacional San Andrés, and Universidad Católica de Bolivia in La Paz. In Ecuador, PUCP is linked with Catholic universities in both Guayaquil and Quito, the Universidad Particular Técnica de Loja, Universidad Católica de Cuenca, Universidad Central del Ecuador in Quito, and the Escuela Politécnica del Litoral in Guayaquil. Locally, PUCP is also part of several university networks, with UPCH, Universidad del Pacífico, and Instituto Nacional Pedagógico de Monterrico.

PUCP began with two departments, Literature and Law. Later it expanded with Institutes for Commercial Sciences, Women's Studies, and Languages. Departments of Engineering, Education, Religious Studies, Agronomy, Social Sciences, Business Administration, Art, and Communications came later. The university has grown to approximately 15,000 undergraduate students in 43 different specialties and 800 graduate students, 31 studying for a master's degree and three for a doctorate.

The university has undergone infrastructure renovated, as well as reorganization of its administrative practices. Emphasis has been placed on the development of the Department of Information and Technology so that the university can offer the best technological services to its students.

Pre-service Teacher Training Programs

The degrees outlined in Chapter II of the main assessment report include a specialty in early childhood development, which prepares students for the design and development of educational materials, projects, and curriculum. There are 109 credits to be earned as part of the general syllabus, 72 in the specialty, 21 in professional practices, and nine credits in foreign language workshops.

Aside from degrees in elementary and secondary education, the university offers a variety of diplomas. Some diplomas can be obtained in two semesters, like the one for faculty in another discipline wishing to gain knowledge through a selection of education courses. Others, like the Diploma in Intercultural Education, take one year, while the Diploma in Educational Projects and the Culture of Peace involves a three-year course of study.

According to university statistics, the total number of students between the first and second semester of study registered a mild modification, with the largest number concentrating in two areas: Early Childhood Development (38 percent) and Secondary Education (39 percent). There was a significant increase of students registered in the new degree in Education in Development, from five students to 35.

Beginning 2000 to 2002, there were 538 students registered, 205 in the degree program in Early Childhood Development, 91 in Elementary Education, and the rest in Secondary Education. A total of 1,244 students registered for the various diplomas; however, this total includes a mix of on-site learning courses and distance learning.

In-service Teacher Training Programs

After one year of work at an ISP, a teacher can begin studying for a bachelor's degree in education either directly at the university or through a distance learning course of study. The distance learning modality follows an independent course of study based on the schedule of each student. Students receive self-instruction packets with cassettes and texts. There are three on-site workshops each semester and the rest of the time a professor or tutor is assigned to a student and communication can be made via the Internet. Students can also reach their professors via regular mail, fax, or the telephone. Students schedule a specific time their professor for personal consultation through the telephone or using the Internet.

The *Bachillerato a Distancia en Educación* can be achieved in one year with a load of 30 credits, along with a written exam and personal interview. The *Licenciatura a Distancia en Educación* can be achieved after the coursework of the study plan (including required courses in a foreign language) has been completed, along with a written competency exam, a proposal for a particular educational innovation, and a thesis.

PUCP has been a pioneer in distance education by opening educational opportunities to nonformal programs. In 1982, it set out to train coordinating teachers and "promoters" in Nonformal Early Childhood Programs (PRONOIE). With the collaboration of countries such as Bolivia, Ecuador, the United States, and Canada, the program reached rural areas. The idea is to serve trained and untrained professionals working with children ages three to six years. Rather than having the students come to Lima, the workshops are done onsite. But, the methodology is the same as the rest of its distance courses. The way the course is presented makes this a model experience. On-site presentations are built into the material. It also provides the student with a hands-on experience using the methodology through group work and personal time with instructors. It is worth noting that this particular course of study offers five packets of modules, one of them in student evaluation, another in problems of communications and language, and a third one called the psychogenesis of the written word. The substance of that module is the closest to treating reading readiness of any of the courses offerings of the university.

In 1986, PUCP began to work in Andean areas of the country in Ayacucho and Huancavelica with the introduction of High Scope. A combined effort by USAID, CIDA,

and PUCP, the program began with professors at the Universidad Urubamba and began to delve into bicultural and bilingual studies. A total of 3,700 teachers from the ISP had been trained by the end of the 1980s.

ICT and other Resources or Technologies

PUCP uses cassettes and radio to reach the Amazon region. Texts, videos, and state-of-the-art technology are available and in use on the PUCP campus. The university is committed to modernizing in ICT. It houses a fiber-optic cable and manages a system that can provide interactive teleconferences.

PUCP has recently built a complex to house the Department of Communication. Although there is as yet no educational television channel, the department offers programs on video for their distance education courses.

Population Served

PUCP pioneered distance education in the provinces, in cities such as Arequipa, Chiclayo, Puno, and Tacna. The university has also sponsored sporadic projects in rural areas, such as the bicultural and bilingual program that trained teachers in regional ISPs at the Universidad Urubamba, which was later taken up by the Universidad La Salle.

The new diploma in Intercultural Studies has renewed interest in reaching out to rural areas. At present, there are over 6,000 students in the provinces enrolled in the bachelor's degree program in education.

However, the assessment found that during its 54-year history, the university has not made a serious commitment to the urban or rural poor of Peru. It does offer a discount system enabling those students without financial means to attend, although often even this reduction in tuition is not adequate for disadvantaged students.

Universidad Nacional Mayor de San Marcos (UNMSM)

Introduction

Universidad Nacional Mayor de San Marcos (UNMSM) is a public institution founded 450 years ago. The university became the alma mater of many other universities in Latin America. This institution has produced many illustrious men and women and has been the intellectual center for many generations of young people in Peru and Latin America. As an advocate for the environment, social justice, and human rights, it has dealt with the political whims of each successive government.

At the beginning of a new millenium and a new democratic government, UNMSM offers courses in 20 disciplines and has centers of research, some specifically for cultural dissemination. In 2002, the university had a total of 30,089 undergraduates and 2,500

graduate students. Approximately 50,000 students apply per year and only 5,000 are admitted

Capacity for Research and Innovation

The university manages a Superior Research Council (*Consejo Superior de Investigaciones*), which establishes the norms that regulate the presentation, approval, registration, execution, and evaluation of the research taking place in the university. This council administers all of the research financed by the university and other national and international institutions.

Almost all of the departments in the university have a research unit. The Basic Sciences, Health Sciences, and Engineering Departments are heavily involved in research. The Education Department works under the Humanities Department, where research is mostly in the areas of Linguistics, Language, Pedagogical Information, and Special Education.

The university also has three academic research units: the Academic Research Library, the Academic Research Newspaper, and Academic Research Periodicals.

Organization

The University Assembly, made up of the rector, professors, students, and department heads, governs the university.

The university runs on public funds, with government funds representing 50 percent of UNMSM's budget. The rest of the income is garnished through entrance exams and minor fees for different programs. Graduate courses bring in \$60 per course per student a year. The rest of the budget is supplied by donor funds for different projects. This money is handled by the San Marcos Foundation, rather than through government channels, allowing it to bypass time-intensive bureaucracy.

UNMSM has established 101 agreements with different countries. These agreements imply a reciprocity that does not necessarily provide any funds for the university. However, the ties established between the university and the University of Salamanca in Spain, the U.S.-based MacArthur Foundation, ILCE (Instituto Latinoamericano de la Comunicación Educativa) in Mexico, UNAM (Universidad Autónoma de México), and Germany via GTZ, provide the students with a wide range of experiences and educational opportunities.

The university has 17 centers throughout the country with 40 students in each. Some of the centers are located in Huancayo, Juliaca, Puno, Huaraz, Huancavelica, Piura, Chiclayo, Cañete, and Trujillo to name a few.

The University Assembly directly felt the authoritarianism of the Fujimori administration when a government intervention group took over management of the university. With the downfall of the regime, the university agreed to form a truth commission in order to

investigate all the wrongdoings and set standards, and checks and balances, which would keep such an event from happening again.

Pre-service Education

The Professional Academic School of Education is in charge of the Education Department at UNMSM. Courses are offered to obtain a degree in Early Childhood Development, Elementary Education, Secondary Education, and Physical Education.

The course of study follows what is called "the integral approach". Students are to cover courses in basic humanistic culture, the sciences according to grade level, professional technology, research, and sociopolitical understanding of the educational requirements of the times. There are 1,000 students enrolled in various educational courses. For Early Childhood Development and Elementary Education there are 150 students combined.

Students do practice teaching in the university's laboratory school "San Marcos", as well as in other schools.

UNMSM offers graduate degrees in Education, such as a master's degree in School Administration, Math, and Intercultural Studies. A second specialty is offered in Learning Disabilities, in addition to a doctorate in Education. There are no specific courses offered in reading, other than linguistics at the secondary level, nor is there a reading specialty.

The master's program in Intercultural Studies is the newest and most successful program that the university offers. Between 1998 and 2000, 11 Peruvian professionals were chosen, out of 160, to enter the Pro-EIB program (Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos), under the auspices of GTZ and with the support of universities, indigenous organizations, and the MOEs of Argentina, Bolivia, Colombia, Chile, Ecuador, and Peru. These students took courses at the Universidad Mayor de San Simón, in Cochabamba, Bolivia, in coordination with UNMSM.

In-service Education

UNMSM actively participated in PLANCAD, the teacher training program of the MOE. Since it does have 17 centers throughout the country, most of the courses were on site.

As other universities, UNMSM is open to anyone from the ISPs, offering the usual *bachillerato* and *licenciatura* to these teachers. Technology is widely available, with the use of the Internet and the university television (TELEDUSM).

ICT

The network established in 1996 makes UNMSM one of the universities with state-of-the-art technology in the country. Gigabit Ethernet guides the network, RED-UNMSM, via a fiber-optic cable from the Peruvian university system. The network brings together

19 departments, integrating all computers in the university system into one single network

Coverage has been extended also to students in their own homes through a service called INFOVIA. This service provides email, development of Web pages, databases in CD-ROM, and much more.

TELEDUSM, or university television of UNMSM, is a university business that serves the school and the general public. It produces documentaries, specials, scientific pedagogical programs, and fiction programs that help serve the needs of the academic world. The university television station is one of the partner founders of ATEI (Asociación de Televisión Educativa Iberoamericana), an organization that gathers 250 educational institutions throughout the Americas and Spain, and is also the founder of Educational Television in Peru.

UNMSM also has one of the largest university libraries in Peru and perhaps in all of Latin America. The structure consists of four buildings with five floors each. It has the capacity to simultaneously serve 2500 people. The library is automated and users can access the on-line catalog using 120 computers. By using the MARC format, anyone in the system can access the catalog on-line and check out books without having to be at the library.

The library also has an auditorium that seats 400 and is linked with the library system, thus making available Internet use or video conferencing. Its wireless connections make it an attractive place to offer theatrical presentations.

To round off what UNMSM offers in technology and resources, its virtual library with 2500 electronic magazines enables students to view complete texts as well as graphics and photos of information that is constantly updated. It is projected to input in the next few years all the documents of national origin dating back to the eighteenth century.

Population Served

UNMSM may have begun as a university for nobility, but for years has been for the people of Peru. The university reaches all socioeconomic levels and seeks students in remote areas of the country. With its interest in bilingual and intercultural studies, UNMSM has begun to reach out to the indigenous population of Peru also.

Universidad San Ignacio de Loyola (USIL)

Introduction

Universidad San Ignacio de Loyola (USIL) is a new private university in Lima, with a modern campus that is extremely well equipped with the latest technology. The university expresses great satisfaction with its capabilities for video teleconferencing having obtained new equipment.

Capacity for Research and Innovation

USIL prides itself on its advanced technological equipment and is unarguably innovative in this respect. The Education Department has collaborative arrangements with the University of Hartford to obtain a master's in Computer Education and Technology, and the University of Pennsylvania, which facilitates students and professor exchanges.

Organization

USIL is clearly oriented towards business. Below its logo is the slogan, "The university that forms businessmen." The university has ten departments: Business Administration, Hotel Administration, Administration of Tourism, Business Art and Graphic Design, Science and Technology of Communication, Education, Economics, Agroindustrial Engineering, Information Engineering, and Marketing. USIL offers an MBA in collaboration with the University of Quebec and runs several international exchange programs with institutions both in the U.S. and in Europe. The university has a special arrangement with California State University enabling students who receive an MBA at USIL to obtain an MBA at California State University at Fullerton. This MBA is achieved by a combination of three courses at USIL taught by professors from Fullerton, three courses by video conference and two courses during eight weeks on site at Fullerton. USIL also has a distance learning connection with the Massachusetts Institute of Technology (MIT).

Pre-service Education

The undergraduate education curriculum lists a course in the teaching of reading as well as a course in reading methods for preschool. It also lists courses in management, marketing, and accounting. The exact number of students in the Department of Education was not determined.

In-service Education

In-service training is provided for 1000 teachers. We were not able to obtain specifics as to the type of training or the process of teacher selection.

ICT

The university has trained health administrators by means of teleconferencing in four Peruvian cities: Ayacucho, Huancavelica, Andahuaylas, and Huaráz. The university now has 22 remote sites in Peru, including Chiclayo, Cajamarca, Cuzco, San Augustín, and the University of Amazonia, and those mentioned above. These facilities could be made available for training or conferences offered by the Andean CETT.

Population Served

USIL is a private school and generally serves students who can afford to pay the tuition.

Instituto Pedagógico Nacional Monterrico (IPNM)

Introduction

IPNM is a public teacher training institution with goals similar to those of the Peruvian ISPs. However, IPNM is the only national teacher training institute and enjoys an excellent reputation for its attention to teaching and its focus on the classroom. The school is run by the religious order Sisters of the Sacred Heart.

Capacity for Research and Innovation

IPNM participated in the MOE's PLANCAD teacher training program and also offered in-service training for the MOE's Infoescuela program. The institute also participated in the design of the reform of the undergraduate teacher training curriculum, which emphasizes the interweaving of applied research into practice teaching experience. The institute also runs a lab school in which students can complete parts of their student teaching experiences.

IPNM has been engaged in an innovative project called PenTAREAs, which works with primary-school children in a poor zone of Lima. One of the project goals is the improvement of reading skills, which are assessed by pre- and post-testing.

The institute has also assisted in the development of teaching materials under the Convenio Andrés Bello.

Organization

IPNM is a public institution with administrative autonomy. The school has 1,141 students in its undergraduate education program. Divisions within the school include Preschool Education and Primary Education, with specializations offered in Mathematics and Physics, Social Sciences, Language, Literature and Communication, and Natural Sciences. The institute also has a Department of Continuing Education.

Pre-service Education

IPNM is strongly committed to providing quality pre-service education. Its program involves a cycle, practice-theory-practice, in which students observe in classrooms, then reflect and learn about the theory of what they observed, then focus on the practical aspects of how to teach effectively. The cycle is repeated, with an emphasis on applied research to improve effective classroom practice. The institute has a caring relationship with its students. Students not only observe in the laboratory school, which has 1,500

students, but are placed in student teaching experiences in public schools throughout greater Lima.

In-service Education

As mentioned, IPNM participated in the MOE's PLANCAD in-service program, training teachers at both primary and secondary levels. The school's Department of Continuing Education also offers a two-year *licenciatura* to practicing teachers who graduated from a four-year ISP program and received certification, but no degree. Students who do their undergraduate work at IPNM may study for five years and receive the *licenciatura*. IPNM also did in-service training in Bambamarca (Cajamarca), training teachers in social sciences. The institute has also trained teachers in how to use newspapers in classrooms in a project with *El Comercio*, a prominent Lima newspaper.

ICT

IPNM has Internet facilities, two computer rooms for student use, as well as a library and language lab for learning English.

Population Served

IPNM is a public institution dedicated to serving low-income students and teachers in disadvantaged areas. The institute's projects focus on trying to improve the quality of education in poor schools. IPNM has not participated in bilingual education, but is willing to do so.

COUNTRY CAPACITY

Through interviews and conferences, the assessment team observed a definite resolve by individuals, mostly key education and political stakeholders, to take a proactive approach.

The Minister of Education is acutely aware of the status of education in the country and is very eager to solicit any kind of assistance that would elevate the standard of teachers and thus confront the problem of quality throughout the system. The Ministry alluded to the willingness of the government to set education as a priority in the agenda, manifested by the administration's intention to increase the education budget.

MOE staff expressed definite interested in CETT. Although the MOE has revised curricula and now provides textbooks to classrooms, test scores are not yet showing gains in reading. MOE staff recognizes that reading is still a weakness and that teachers need much more help in developing effective classroom practices in the teaching of reading. There are several ways in which CETT could assist existing efforts by the MOE. The Andean CETT could work with the five ISPs in which bilingual programs are being introduced. Useful interventions might include relevant research and/or training of the personnel in those ISPs who provide courses on the teaching of reading.

The GTZ staff working within the MOE on bilingual programs stated that it would welcome the contributions of CETT. Since the GTZ staff is engaged in many of the same activities that are proposed for CETT (teacher training, development of materials, etc.), it would be important that CETT work in collaboration with GTZ to avoid duplication of effort.

Many institutions are involved in distance education. The Internet is the medium for much of the training that reaches distant rural areas now and rural inhabitants have more and more access to Internet cafés. Universities, such as USIL, PUCP, and UNMSM, have extensive teleconferencing networks, but these have not yet been used in any great degree for training teachers. As mentioned earlier in this report, President Toledo's Plan Huascarán will place computers in many elementary and secondary schools and will also provide teacher training in computer use. It is important to note that, while access to computers and the Internet is increasing, there are still many remote areas in Peru without electricity that cannot currently benefit from this technology. Any distance education program must take into consideration the challenging geography and extreme poverty in remote parts of the country.

There are several in-country financial resources that could contribute to CETT, some of which are major corporations such as the Telefónica Foundation, Ford Foundation, and Phillip Morris. A team member already talked to some of these companies, who voiced an interest in CETT, but felt a need to be approached with concrete needs.

The NGO community in Peru is very strong. Many NGOs were involved in providing inservice training through the MOE's PLANCAD program, and many also are strong contributors to educational policymaking. Several that could be involved in CETT are outlined below:

GRADE is a private, non-profit research center dedicated to studying the economy, the environment, and education. The center works toward making research serve to change or adjust policies, and inform the way development is implemented. GRADE is strong in research and test development, and interested in helping CETT in either of those areas, as well as possibly in designing and planning.

The TAREA Educational Publishing Association is an NGO that does far more than publishing. TAREA produces an excellent monthly journal, which includes articles by leading educators. Its other publications include elementary textbooks using TAREA's curriculum that integrates subject areas from the MOE's official primary-grade curriculum; its emphasis is on starting from the child's world and interests through experience units in which the child participates actively in constructing his or her own learning. Other publications include several excellent books on the teaching of reading, including *Read Better in Order to Teach Better*, a book designed to help teachers to improve their own reading comprehension. TAREA was part of a consortium of NGOs that provided teacher training in PLANCAD and that is also actively involved in sponsoring the PIEDI project with UPCH (See Best Practices.) TAREA also worked on

the USAID Democratic Schools Project in Ayacucho, and is engaged in an ongoing project on children's rights. TAREA is currently working on a project with the MOE to redesign the teaching career, pay scale, etc. TAREA is interested in the CETT program and could bring particular expertise to bear in the production of materials and/or teacher training.

Fe y Alegría is a Jesuit organization that runs public schools in 14 countries in Latin America. In Peru, the organization runs 55 schools that include preschool, elementary, secondary, and technical programs. In addition, Fe y Alegría is now running four rural networks of schools. The organization has a special arrangement with the MOE allowing Fe y Alegría to appoint school principals and to make recommendations in the hiring of teachers, although such requests are not always honored. The provision of teacher training is an integral part of the Fe y Alegría plan. Teachers travel to Lima annually to receive this training.

Fe y Alegría also participates in the consortium of NGOs with TAREA, mentioned above, that offered teacher training in PLANCAD and sponsors the PIEDI project with UPCH. The director expressed great interest in CETT, since reading is such a priority need. The CETT program would be welcome to use Fe y Alegría schools for pilots and training.

There are many excellent NGOs our team did not visit that could be tapped to provide various services to CETT. For example, CIDE ran a successful USAID project in Ayachucho on democratic schools. CIDE also provided in-service training through the MOE's PLANCAD program and is in the consortium of NGOs sponsoring the PIEDI project.

Peru 2021 offers school principals the opportunity to be trained in management with a concept of leadership that focuses on the school and the community, based on the Deming principles of total quality. Peru 2021's desire to have a positive impact on the country is illustrated by the group's emphasis on decentralizing, strengthening school autonomy, fostering community involvement, enhancing local decision-making, and promoting accountability.

In addition, the newspaper industry could very well support CETT by offering to develop a section in the newspaper with children's stories. CETT could also train teachers on how to use the newspaper in class as an educational resource.

Perceptions of the CETT Concept

As mentioned above, MOE officials interviewed were highly enthusiastic about the opportunity that CETT would provide their reform efforts. Teacher training, as PLANCAD demonstrated, is needed. There is no doubt that the MOE wants CETT to be in Peru and feels that training teachers in new reading methodologies is not currently being covered. MOE staff suggested that the Andean CETT might work with the five ISPs in which bilingual programs are being introduced. Useful interventions might

include relevant research and/or training of the personnel in those ISPs who provide courses on the teaching of reading.

MOE staff also suggested that CETT could offer 20 ISP faculty members special training in reading. Then, the ISPs could offer a diploma or specialty for student teachers and slowly begin to train teachers as part of their continued education. Another suggestion was to train principals and supervisors as well. MOE staff saw CETT as encouraging short story writing contests, poetry, and children's literature.

The education team at USAID was very excited about the possibility of hosting such a center. Their interest was in expanding the education program that they now have, which is in girls' education. Mission officials were eager to express their interest and hope that the center would be in Peru. They left no doubt that they are willing to expand the capacity building among CETT, MOE, NGOs, and the community-at-large in this effort.

University officials were enthusiastic about the possibilities that CETT provided new teachers. Time and again they expressed the need that exists in reading comprehension and the meager attention devoted to it in their curriculums. They wanted to explore the possibility of offering a reading specialty in their programs. Every institution visited wanted to host CETT.

The private sector, as has been mentioned, is very interested in collaborating with CETT. They supported the concept of teacher training in reading methodologies since they were well aware that reading comprehension was a pervasive problem in education.

The only donor agency visited was GTZ, which has an office inside the MOE. As in Bolivia, the GTZ welcomed the possibility of collaborating in the area of intercultural approaches and bilingualism in CETT. GTZ wants to work closely with teachers and this collaboration would give them an opportunity to do so.

The field visit was made during school vacations so teachers were not easily available. The team interviewed three teachers, two of whom were from public schools and one from a private school. All three felt that teacher training was very needed, especially in reading. They felt they had not been properly trained in this area and were willing to pay for a course if one were offered.

Recommended Institutions

After careful analysis of the universities visited in Bolivia, Ecuador, and Peru, the institution recommended to be the host of the Andean CETT is the UPCH in Lima, Peru. The university's mission is to promote the development of competencies for innovation.

UPCH has contributed to the quality of education in Peru. The university has exemplified its teacher training in PLANCAD. It has worked with principals and other school administrators, has collaborated with specialists in other areas, and has been a key

institution working with ISPs. This university knows the target population of CETT, and has worked with it for as many years as the department has been in operation.

UPCH has, in Dean Manuel Bello and his team, a group of professionals that are experienced and attuned to the educational needs of the region. As has been mentioned before, one of the key goals in the department is an emphasis on continued learning through ongoing, practical research. When visited, they were already formulating ideas on how to combat the reading problem in the country. The university is notable for the variety and quality of its in-service offerings. This university would be fully committed to CETT goals.

PUCP is a strong academic presence in Peru and is highly respected, but, according to some interviewees, does not perhaps have the agility of a smaller institution to develop and support an innovative CETT program. It is quite possible that UPCH will seek to collaborate with PUCP or to include PUCP staff members in some CETT activities. As previously noted, they both belong to a consortium of four universities with a focus on distance education.

Another recommendation is to gather information about what is being done and where it is being done in order to collect and follow successful practices. For instance, the work of IPNM would be beneficial to include in CETT. As has been already mentioned, IPNM works with primary-aged children in a poor school in Lima. Because one of the goals of the PenTAREA project of IPNM includes the improvement of reading skills, it could function as a point of comparison for a CETT pilot. It would also be worthwhile to ask IPNM to train teachers in how to use newspapers in the classroom, considering its experience in projects of this type.

Other pilot groups could be the five ISPs in the pilot program of the MOE, with the one in Huamanga having the most experience. The other ISPs are in Ayacucho, Huanta, Huancavelica, and Cuzco. These ISPs form a network that works with MOE's bilingual program. The ISP in Iquitos works with languages spoken in the jungle and could be tapped to collaborate on CETT goals also.

BOLIVIA COUNTRY ASSESSMENT

General Context

According to economic indicators, Bolivia is the poorest country in South America, with a GDP per capita well below that of its neighbors. About two thirds of the Bolivian people are poor, with extreme lacks in health, education, and nutrition. Because it is landlocked and has a limited communications infrastructure, Bolivia does not have significant access to export markets. The stratified society and political instability in Bolivia mean that despite the successful economic stabilization of 1985-1998, little progress in the war on poverty has been achieved.

Political instability, corruption, and economic downfall have caused a migration to the larger cities, which has burdened the urban school system with indigenous students whose first language is not Spanish. As the increasing population finds no outlet for employment, Bolivians seek employment elsewhere, some as far north as the United States. Scores of qualified teachers have left the country, many settling in Colombia, Costa Rica or Mexico.

Development of public education in Bolivia has lagged behind that of its neighboring countries. In 1902, with funds from Belgium, teacher training institutes (ISPs) were founded. In 1930, educational reforms began to take place in the Andean schools. Bolivia became the first country to start the concept of schools clustering to form a *núcleo*. This idea involved choosing a school to lead among a group of schools (made up of about ten schools) in the area. Supervisors worked out of these leader schools to monitor the surrounding schools. Approximately 1800 *núcleo*s are functioning in the country currently.

Unfortunately, this initiative has not been followed by any significant action in education improvement. An economic crisis soon hobbled Bolivia, affecting the earning power of every household and keeping many of its citizens in dire poverty. In the grip of deep poverty and a lack of economic opportunities, children were forced into the labor force, resulting in alarming school dropout rates.

By 1952, the government of Bolivia initiated an educational reform under the Movimiento Nacionalista Revolucionario (MNR) party. The new education law focused on traditional methodology. The structure of the system did not consider early childhood development, nor did the plans and programs of the state include a curriculum. Everything was theoretical and there was no emphasis on practical aspects of teaching. At this juncture, Canada funded the Bolivian government to begin the training of teachers.

Another reform followed in 1990, supported with funding from the World Bank. The Programa de Reforma Educativa (PRE) was formed. This far-reaching reform

revolutionized the structure of the curriculum for primary grades. For the first time, higher learning was included as part of the system.

Until the time of this reform, the country had no private universities. Three universities had formed in the 1980s, but there were clashes with public universities that opposed their existence. By 1990, there was a sudden explosion of private universities, each carving out a role in education and each seeking accreditation. UN was one of the first universities to be accredited by the government. In 1996, an agency (Consejo Nacional de Acreditación Superior) was formed to accredit all universities.

With the educational reform of 1994, there were very direct and clear guidelines on how the entire education system had to change. The old methods were discarded and the new were brought in, such as constructivist approaches, making teaching methodologies more child centered. Unfortunately, the wide sweep caught teachers by surprise. Embedded in the vision of the 1950s, as mentioned above, teachers were only used to traditional theory and no practice. Teachers had no concept of the new learning methodologies. Having never before been accorded any importance, teachers now found themselves expected to use learning concepts they did not understand. Teaching was highly traditional; dictation by teachers and memorizing by students were the main classroom activities.

Some advances have been made since the 1994 educational reform, the most significant of which has been the new commitment and effort from the government to restructure the system in an attempt to bring about overall quality in education. New guidelines in teacher training have been developed. The first graduates of the new system have not yet been evaluated.

However, of the 100,000 teachers in Bolivia, 23,000 have never received any type of training (they are called *interinos*). Some have secondary education, but others have only a sixth-grade education before they go directly into teaching in the school system. There are currently 65,400 primary teachers, first through sixth grade, and 4,000 kindergarten teachers.

According to a World Bank report, one of the successes of the new reform is that the enrollment level in the primary grades is up to 97 percent. Gender equity problems exist in the rural areas, including differences in the age at which girls actually begin school and length of time they stay in school. Both boys and girls generally complete less than seven years of school, with 10 percent of the children being malnourished since early childhood.

Bolivia's financial commitment to education has been consistently low. According to the PREAL (Partnership for Educational Revitalization in the Americas) study, in 1996 Bolivia was spending 5 percent of GNP on education. Due to tough fiscal challenges, Bolivia has undergone fiscal adjustments, resulting in a reduction of overall spending. Whatever the education budget, most of the money goes to pay teacher salaries. And because of this belt tightening, international donations are providing the funds for maintenance of and new development of infrastructure. Programs via the World Bank

and IDB are providing the means to better the quality and efficiency of the education system. Donations from GTZ have included funding for Pro-EIB, which has very successfully established bilingual programs. Other significant donors include the Spanish agency Cooperación Española.

Little support comes from the teachers' union, to which one hundred percent of the teachers belong. The union is a strong force in negotiations with the government. The union's power could extend even to the point of paralyzing the government with strikes.

Parent and community involvement is increasing, largely due to the legal stipulations in the educational reform laws, which encourage education to be participatory. Municipalities have been charged with the education of communities, which has produced local accountability and increased popular participation.

Perceptions of Educational Quality

Almost everyone interviewed during this assessment agreed that the educational reform is making progress. The national vision for teacher development and training is pervasive and has had support across all political parties. The Minister of Education is very committed and involved in all aspects of development. A very strong program promotes indigenous languages and cultural sensitivity. Books have been written and published in Guarani, Quechua, Aymara, and Spanish to enhance intercultural reading instruction. The overall structure of teacher training has changed. The current objective is to provide quality education at the pre-service level and to foster and provide the opportunity for inservice teachers to attain their degrees and a higher level of professionalism.

The MOE has a department of training that is currently conducting in-service training and is very involved in the design of curriculum. Universities have a hand in supervising training at the teacher training centers (INSs). Former educational supervisors are now termed *asesores pedagógicos* and are intended to provide training at the local level. Several NGOs are also involved in teacher training, some in collaboration with universities or the MOE.

Consensus is that the quality of teaching is generally poor. Tests done by international donors have shown that students are not learning and meeting the required competencies. The reform was enacted to readdress the importance of quality education; teacher training has become the cornerstone of that effort. Teachers earn as little as \$100 a month and do not have any incentives to further their education, yet they are willing to pay universities \$1,000 a year to earn a degree. Perhaps in part because there is so much training activity throughout the country, teacher retention is not a problem.

It was often mentioned during the assessment that, along with new methodologies and new theories, teachers should also learn how to use their new classroom resources effectively. Materials previously given have not been properly or fully used. In many cases, the new texts have been shelved, while teachers continue to use old materials. Teachers have been using what they know best even if the material is obsolete and

ineffective. An effort in place now is to train teachers in the successful use of those new materials

Teacher Training and Reading Instruction

In spite of the recent reform efforts, ineffective and insufficient pre-service and in-service teacher training is considered a strong contributor to underachievement in Bolivia. Before the educational reform that began in 1994, reading was taught by the *silabario*, a form of text commonly used in Andean countries to learn syllables. Children learned to decode, but not necessarily to read for meaning.

Pre-service Teacher Training

Pre-service teacher training in Bolivia is offered by 24 normal schools (INSs) that provide a four-year program after the completion of high school. These schools are part of the public education system run by the MOE and adhere to MOE curriculum and guidelines. Prior to the reform, universities were not involved in pre-service education; teachers who graduated from the normal schools were certified to teach, but received no degree. However, because of great concerns about the very low quality of the normal schools, since 1995 the MOE has asked universities to oversee programs at several of the INSs. In addition, teachers who graduate from an INS not only are certified, but now receive a Superior Technical Degree (*Grado Técnico Superior*). They then have the option to attend a university for two years to receive a college degree (*licenciatura*). Teachers receive no additional pay for additional study; the pay scale is based entirely on years of experience. Everyone interviewed felt that undergraduate teacher training is still in need of considerable improvement, both because there has not been sufficient time to improve the quality of the program being provided and because of the very poor education received by the students entering teacher education.

As about 23 percent of practicing teachers are not certified, many universities also run a new program for uncertified teachers who have been teaching for five years. The majority of these teachers are found in remote, rural areas where the government simply cannot find qualified teachers.

MOE curriculum for INSs includes coursework related to the teaching of reading and writing, as well as a specialization in language. The curriculum developed in the reform is quite sophisticated and reflects the latest research on language development and reading. It includes a strong emphasis on applied research, which is interwoven with the system of school observations and practice teaching experiences of students. Unfortunately, there is still a gap between the quality of the written curriculum guide and the way in which the curriculum is actually delivered in the INSs. An additional problem is that the entering teachers have themselves attended very poor quality schools and many do not read and write well themselves. In rural areas, few or no reading materials are available and many teachers have not developed a habit of reading.

The *licenciatura* programs of study for those specializing in preschool or primary education also include courses on reading and language. However, no advanced degrees or specialized graduate work in reading are provided in Bolivia. No reading specialists are on the faculty at the universities visited and reading specialists are not available in schools. Reading was considered a critical weakness in curriculum and programming by every person interviewed. The need most emphasized was for quality teacher training in early reading instruction that focuses on active participation of children in their own learning, as sought by the ministerial reform. In addition, there is a need for research on reading methodologies, formative evaluation, and differential instruction techniques. Some interviewees suggested that support for a master's degree program or graduate specialization in reading could be an important contribution to Bolivian education.

In-service Teacher Training

As mentioned above, a goal of the reform in Bolivia was to introduce modern pedagogical approaches in which children are active participants in their own learning. To this end, the MOE produced many new texts and teaching guides, including texts in Aymara, Quechua, and Guarani. Initial in-service training provided to the teachers focused mostly on the goals of the reform and great emphasis was placed on the training of a cadre of advisors (asesores pedagógicos) who were trained and placed in each núcleo. They were to be responsible for training and supervising the teachers. Unfortunately, many were young, inexperienced teachers, who in many instances were not well enough prepared and encountered resistance from the older teachers. The asesores pedagógicos have received continuing training and the MOE still relies on this approach. The MOE also has plans to place Teacher Resource Centers in each núcleo. These centers, based on a model designed by CEMSE (see section on Country Capacity), will have libraries, resources, facilities for teacher training, and may include computers and Internet connections. The asesores pedagógicos may be based in these new centers.

The team heard consistently in assessment interviews that teachers need more in-service training. A common observation was that teacher in-service must involve teachers for a long period of time—at least two to three years—and that it must include a substantial amount of in-class support and supervision from experienced personnel. It is possible that the *asesores pedagógicos*, with sufficient training, could eventually provide much of the in-class support and follow-up needed by teachers.

Not only have teachers had difficulty making a change in their approach to teaching reading, but parents have also tended to resist the change perhaps in part because the MOE did not put in place a public relations campaign to promote the reform. The parents wanted to see their children bringing home the traditional notebooks full of neat copying. Since schools were closed during the assessment visit, the team was not able to visit any public schools. However, some interviewees told us that gradually many teachers have become more familiar with the new methods and materials and that, in such cases, the parents have seen the results and have become more comfortable with new methods. In many other instances, teachers have used the new materials, but with the old methods, and have continued to teach reading with little or no emphasis on comprehension. The

skills most commonly mentioned as needed for in-service training were the same as those mentioned above for pre-service training: comprehension and formative evaluation so that teachers can understand what children know and can plan appropriate, diversified instruction to meet children's needs.

Specific Training Needs

Disadvantaged Communities

In Bolivia, almost all children in the public schools are from disadvantaged, poor communities. The most disadvantaged communities are in remote rural areas. These communities suffer from their isolation, as it is difficult for supervisors to reach the teachers and difficult for teachers to access quality training. In addition, often the children are malnourished, the parents are illiterate, and a culture of reading that would stimulate an interest in reading in a young child has not been established. In many rural communities, there is still a schooling supply problem, with many communities only offering the first three or four grades of school.

Although existing institutions do technically address the teacher training needs of disadvantaged communities in terms of quantity, there is an enormous gap in terms of quality and in delivery due to the digital divide. Since travel is difficult and teachers cannot generally leave their classes during school hours, interviewees emphasized the importance of finding ways to bridge the digital divide and bring training to teachers in remote areas through innovative distance education programs that include supervision and in-class support by visiting supervisors. Many also emphasized the importance of involving the teachers in determining their own training needs, assisting them in forming cooperative working groups, and developing their own materials. Another important recommendation was that training should be school centered, to foster cooperative planning and teamwork by teachers and to avoid the tensions created when a single teacher from a school learns an innovative approach not understood by other teachers at the school. In addition, principals and supervisors should be included in in-service training.

Bilingual/Intercultural Education

As stated earlier in this report, reading instruction is particularly complex in Bolivia and research is needed in order to understand the best way to teach reading to children who speak other languages. Teachers need training not only in how to teach in bilingual programs, which initiate instruction in the native language and gradually make a transition to Spanish, but also in how to teach reading in Spanish to groups of Spanish-speaking children that may include some speakers of other languages. They also need training in how to work with groups of children speaking several different languages. Such groups are found, for example, in some areas around La Paz inhabited by migrants from rural areas.

The Bolivian MOE has made a substantial commitment to bilingual intercultural education and is assisted in this effort by the GTZ-funded Pro-EIB through its teacher training program PINS-EIB. Eight of the INSs specialize in bilingual, intercultural programs. PINS-EIB provides support to the seven INSs that specialize in the Andean languages Quechua and Aymara. Students must pass a test in the native language in order to be admitted. PINS-EIB includes the following components:

- Support for a master's degree program to prepare administrators of bilingual programs, as well as trainers of trainers. (These might be teachers who will teach in the INSs, or those who plan to provide other in-service training in bilingual, intercultural education.)
- Support for research projects done by students and teachers in the master's program, as well as regional competitions for research projects.
- In-service training for administrators and teachers at the seven INSs with programs in Quechua and Aymara.
- Development of teaching materials in Quechua and Aymara by teachers and students in the PINS-EIB programs.
- Cooperation in a network of related institutions, including conferences, international workshops, etc.
- Organization and maintenance of relevant data and a specialized library.
- Technical assistance.

Students with Special Needs

Bolivia does have special schools for children with serious special needs, but in general no services are provided in public schools for children with special needs, although the reform does plan to encourage the integration of children with special needs in regular classrooms. The Universidad Aquino de Bolivia runs a laboratory school in which children with serious special needs are integrated into regular classroom programs, while Fe y Alegría also provides some programs for children with special needs.

Evaluation

The reform has included the development of a new nationwide educational quality system known as SIMECAL, which was introduced in 1993. The system has focused on one or two grade levels each year, testing a sample of students that includes urban private, urban public, and rural public schools in language and mathematics. The system to date has tested grades 3, 6, 8, and 12. This system will provide a valuable database for measuring improvements or changes in student learning, but cannot be used to assess achievement in individual schools, since it is based on sample data. Interviewees suggested that teachers need additional support in techniques of diagnostic classroom evaluation.

Resources

Although the MOE is providing texts to children in the primary grades, very few other materials are available in classrooms. Neither schools nor communities typically have

libraries or resource centers. In most rural areas, an oral culture predominates, many adults are illiterate, and reading materials are not available. Computers are not generally available and are not used to teach reading. Internet cafés are common in the cities, but very rare in the countryside. In fact, one of the demands made by the *campesinos*, who blocked all roads out of La Paz during the week of the team's visit, was for Internet cafés in the rural areas.

As mentioned above, the MOE has long-term plans to place a resource center in each núcleo. Each such center would have a library, science laboratories for secondary schools, television sets, videos, and possibly computers. These would be for the use of all schools in the núcleo and could also be used for distance education programs. The international organization of Fe y Alegría has plans to develop a network of "telecenters" that could be used for distance education for teachers. The organization FUNDETIC also has plans to make access to a network of Internet cafés available at no cost to teachers and school children. Several of the universities, including La Católica, UN, USFA, and Aquino have Web sites and teleconferencing facilities. USFA has its own radio station and a video production center, La Católica has its own TV station, and both UN and USFA have agreements with ILCE in Mexico, enabling them to use a satellite dish to receive all programs produced by ILCE. There is a proposal to place 120 telesites in the municipalities, which are being decentralized. These could be used on weekends for teacher training.

Best Practices

USFA runs a laboratory school that is used for practice teaching experience by its education students. This school not only has integrated special education students into regular classes, but it also provides special in-class activities for especially talented students. In addition, the school runs a reading incentive program in the primary grades. In one part of this program, children in a class each read a book and summarize it. They then exchange books, so that by the end of the year, each student in the class has read all of the other students' books. Parents interviewed commented on the interesting way in which reading is taught. They felt that their children were learning to enjoy reading. In addition, they stated that their children were happy in the school, that they felt welcome in school, and that the individual attention and warmth had encouraged some very shy children to open up and participate comfortably in school activities.

CEMSE is a resource center serving a network of schools in La Paz. As mentioned previously, this center provides a particularly efficient way to provide library facilities and other resources usually lacking in Bolivian schools. In a program quite unusual in Bolivia, the center also provides *aulas de apoyo*, or classrooms in which children can receive special help during hours when they are not in school. The director commented that they had a good sense of children's needs and difficulties in reading because so many of the children who come to the *aulas de apoyo* need special help in reading.

UN in Cochabamba publishes a whole set of books and modules used in its education courses. One of their books is devoted to the topic of evaluation; it has a particularly useful section on diagnostic evaluation of reading and writing.

The CBIAE begins by training a group of teachers from the first *ciclo* and continues with a commitment of 80 percent of these teachers and the principal to remain at least three years at the school. The center also asks teachers to promise to spend additional time to help train their peers and thus begin forming a network for those in curriculum design, math, reading, etc. Those coordinating the effort in the school are called *denamizadores* or motivators. The CBIAE training is based on three themes: forming the group teams, improving self-esteem, and developing the educational project within the school

INSTITUTIONAL PROFILES

Universidad San Francisco de Asis (USFA)

Introduction

The philosophy and mission of the Universidad San Francisco de Asis (USFA) is to develop the human being so that he or she may reach fullest potential. The university's leaders are very open to new ideas, innovation, and creativity. The pedagogical work at the university keeps in mind that within the strategy of learning is an ensemble of principles, concepts, criteria, materials, and actions that make it possible for the student to build his or her own educational world.

The university was founded three years ago. Although due to its newness it has yet to become accredited, USFA's goal is to become one of the best universities in the country. With a fresh approach, its leaders view Bolivian education as ripe for change. University leaders want to move away from traditional methods of teaching and learning and favor developing the student as an integral part of his or her society.

In addition to the education programs enumerated below, the university also offers courses and degrees in Business Administration, Communications, Industrial Design, Public Administration and Jurisprudence, to name a few. The university has just signed an agreement with a university in Spain that would enable offering USFA's first doctoral program (in psychology).

Capacity for Research and Innovation

As mentioned in Best Practices above, an example of this university's innovative approach to education is the work being done at its laboratory school. Ten percent of children at the school have severe learning disabilities, such as autism, while others are extremely gifted. With this mix of students, teachers doing their practice teaching and university professors are able to do interesting action research. They assess how children learn and how children process their learning. Once these questions are answered, they

reformulate their curriculum and decide how they are going to teach. This evaluation allows for adaptation of the curriculum to the needs of each classroom.

University leaders evidenced a passion, a vision, and commitment to education in conversations with the assessment team. It was clear from the outset that they did not support traditional learning and were believers in change. It is unfortunate that, due to the timing of this assessment, classroom activities were not observed. This would have verified the university's participative and innovative methodologies.

Organization

The team had difficulty securing the necessary details to visit the laboratory school facility because of some disorganization on the part of the university. The team was also unable to obtain materials pertaining to the university's organizational stability that the university had agreed to provide. The challenges the team faced may have been due to the university taking on too many activities and overextending itself. The university's achievements given their recent establishment are very impressive, but the lack of organization noted by the team could constitute a serious pitfall in the future strength and sustainability of the institution.

Pre-service Teacher Training Programs

The university began three years ago with 80 students and today there are 1400 students at the La Paz campus. There are currently 80 students in the Education Department. Students take an entrance exam based on learning styles for admittance to the university. Most of the courses offered are in education, which can lead to a bachelor's or a master's degree in Elementary Education and Early Childhood Development. The Education Department offers *licenciaturas* equivalent to a bachelor's degree, awarded after five years of study. If students complete only two years, they earn a degree as *Técnico Medio* in kindergarten. If they add an additional year to their studies, they then graduate as *Técnico de Inicial y Primaria*.

USFA also manages the INS in Warisata, which has an enrollment of 4,000 students. The region is primarily Aymara and bilingual learning is taking place there. University officials considered the region one of the most difficult in the country in which to work.

Considering the number of courses offered and the emphasis on creative education, this university stands out as the only one in Bolivia offering education as its primary discipline. Nine subjects are offered in the bachelor's degree program, while six subjects are offered in student teaching. In the first semester, trainees have to reach certain competencies and then move on to practice teaching.

In-service Teacher Training Programs

Even though the income of the university comes primarily from its registered students, there is an awareness that the rural area has to be reached. Therefore, the university has

an agreement with the Association of Rural Teachers. At present, 2,000 teachers in the association are enrolled in the university. These teachers are not the same ones going to the INS; these are in-service teachers who work over the course of one year to earn a degree. Courses are taught through a simple distance learning mode: teachers receive packaged material including cassettes, and have continued classroom supervision, twice a month, or via phone or the Internet.

The university has associated itself with universities in Germany, Belgium, Peru, and Chile (Universidad Boliviarana) to form a network of universities with a similar focus and philosophy. It has provided courses in Ecuador and just recently won a bid to train teachers in Puno, Peru. The university has also signed an agreement to train all the teachers of Fe y Alegría in Bolivia.

ICT and other Resources or Technologies

USFA has a press in order to disseminate knowledge stemming from its own research and to produce its own literature publications. Students studying publications are involved in the development of this material. There is also a radio station where students and faculty work together on lessons for teacher training in their distance learning program. A television station develops videos, which are also used in teacher training. This media center houses computers, though most of the computers are in classrooms and the library (a total of 43 Pentium III and seven with Celeron capabilities). The university has its own Web page and will soon be able to communicate with students via the Internet.

The university would also like to secure funds to create centers so that their distance learning program can benefit from the experience of the *asesores pedagógicos* to improve teacher performance.

Population Served

The university serves students in the Education Department on its campus in La Paz, but has also reached out to more isolated populations through its pre-service and in-service distance learning programs, as well as through the INS the university runs as part of the government reform effort. USFA produces radio programs, videos, and printed materials to be used in teacher training programs for remote populations.

Universidad Católica Boliviana (UCB)

Introduction

Universidad Católica Boliviana (UCB) is considered one of the leading universities in Bolivia. The university has affiliations with several universities in other countries. For example, UCB has a collaborative arrangement with Harvard to run a doctoral program in Social Psychology, the only doctorate offered at the university.

Capacity for Research and Innovation

The Department of Education participates fully in the reform effort of the MOE and expressed an interest in innovation and research. Department staff indicated that they had an excellent relationship with the MOE. Various members of the staff have served as consultants in helping to plan Bolivia's education reform. However, staff members interviewed gave no examples of recent innovations and offered no ideas for an agenda for research into the teaching of reading. They also were unable to recall specific examples of recent research done in the department. They expressed doubt about the possibility of working collaboratively with NGOs, explaining that they had not done this before.

Organization

The Department of Education staff was reluctant to provide us with financial information, such as a balance sheet, and did not make available a copy of the annual report or information on the organizational structure. The university has campuses in LaPaz, Cochabamba, Santa Cruz, and Tarija.

Pre-service Teacher Training Programs

The university administers an INS offering a bilingual training program in Tarija. This INS has a population of 700 students. It also runs programs for currently practicing, uncertified teachers in Caranavi. Department staff stated that they teach students different models of how to teach reading, including the whole language approach as well as more traditional methods. They stated that their students learn to use formative evaluation on a continuing basis, that they emphasize the provision of significant learning experiences for children and believe in individualized instruction. No one on their staff has an advanced degree or specialization in reading, since no such programs are offered in Bolivia.

In-service Teacher Training Programs

The university offers a two-year program leading to a *licenciatura* for 200 students in La Paz, as well as in several sites around the country, including Sucre, Caranavi, Coroico, Ilica, and Potosí. Teachers in these programs attend school on Fridays and Saturdays for four semesters and must complete a thesis before receiving the degree. More than 280 teachers have completed these programs. The *licenciatura* is offered in Preschool Education, Elementary Education, Educational Administration, Pedagogical Supervision, Secondary Education (mathematics), and Teaching Information Technology (*Enseñanza en Informática*). The courses of study for Preschool and Elementary Education each include a course in reading appropriate for the level, as well as a course in Constructivism. The Department of Education at the La Paz campus also participates in Project OSCAR, which is designed to train supervisors, who learn to write essays and must produce and defend a thesis in this program.

ICT and other Resources or Technologies

UCB maintains a Web page, has facilities for teleconferencing, and has its own TV channel. The Department of Education has not used these facilities, but thought they could be made available.

Population Served

As mentioned above, the Department of Education runs programs in several areas of the country, including the bilingual program in Tarija. The department operates no programs in the north of Bolivia. Department staff considered that one of their weaknesses in the teaching of reading was the ability to deal adequately with intercultural issues.

Universidad de Aquino Bolivia (UDABOL)

Introduction

Universidad de Aquino Bolivia (UDABOL) is located in La Paz and also has programs in Oruro and Cochabamba. It offers courses of study in Education, Science, Engineering, Health, Administration, and Psychology, as well as an MBA and master's degrees Hotel Management and Public Administration. In addition, UDABOL offers several *diplomados*, a shorter graduate program, including one in Technology and Educational Administration. The university has about 2000 students in undergraduate programs and about 2500 in the graduate programs, as well as 6000 in programs for the *licenciatura*. Professors at the university generally have *licenciaturas* or master's degrees. There are very few professors with doctorates on the staff.

Capacity for Research and Innovation

The Department of Education offers a special course in teaching techniques for professors in other departments of the university. Other innovative practices have included a staff-run program for 150 uncertified teachers in El Alto, a poor section on the outskirts of La Paz. In that program, UDABOL tried to break with traditional practice. The university expressed the need to apply modern methodologies to ideas regarding research in reading, methodologies that can accommodate individual idiosyncrasies and learning styles.

Organization

The directorate is composed of the President, the Rector, the Vice Rector, the Academic Director, and the Director of Research. The university depends on tuition for its financing. The team was unable to obtain an annual report or a balance sheet, and the university did not wish to comment on how much overhead it charged.

The university has good relations with the MOE. Personnel in the MOE commented favorably on UDABOL's management of an INS in Oruro. We had plans to visit this

INS, but were unable to go because all roads out of La Paz were blocked in a protest movement by *campesinos*. Staff at UDABOL said they had received accreditation from the MOE in the new accreditation program.

Pre-service Education

The INS in Oruro supervised by UDABOL provides pre-service education, adhering to the official MOE curriculum, to approximately 2000 students. In addition, as mentioned above, UDABOL offers a program for uncertified teachers in El Alto in a local school. The students, mostly teachers who have moved from rural areas to the city, attend school on Saturdays and Sundays, and receive in-class follow-up about two times per month. The university provides no formal bilingual education programs, but does include the theme in its education courses.

In-service Education

UDABOL offers a *licenciatura* to about 6000 students.

ICT and other Technologies and Resources

The university has facilities for interactive teleconferences and uses cassettes for some courses. UDABOL has more than 100 computers (Compaq Pentiums) and maintains a Web site. University staff commented that it is difficult to use technology in rural areas because of lack of access to electricity and computers, and also because much software is only available in English.

Population Served

The population in El Alto, on the outskirts of La Paz, is a migrant population from rural areas, and would be considered part of the target population, as would students in the INS in Oruro. The World Bank representative suggested that the INS in Oruro might be a good site to run a small pilot program, since it is attended by poor rural teachers, but is not too far from La Paz.

Universidad Núr (UN)

The following information serves to supplement the section on UN found in Chapter II of the main assessment report.

Introduction

The Foundation for the Integral Development of Bolivia was created in 1982 to answer a need to promote higher education opportunities to train professionals to confront rural

poverty. UN was soon created in 1984 and it became the first private university to be granted a presidential decree. In 1985, the university opened its doors with 97 students, and in 1986 offered Bolivia's first private university graduate school. In 1994, it pioneered the first distance education program at an undergraduate degree level.

UN currently has 2,000 undergraduates, 500 graduate students, and over 2,000 students in continuing and distance education. Forty-seven percent are women and approximately 40 percent receive financial assistance through scholarships, discounts based on economic need, or work-study positions. Its annual budget is approximately US\$2.8 million. Its faculty is divided among 180 full- and part-time educators and administrators, and it maintains a relationship with 300 professionals in a variety of disciplines. The university is a non-profit institution, with is main campus in Santa Cruz, and centers in La Paz, Sucre, Cochabamba, and seven other communities.

Capacity for Research and Innovation

UN was founded to serve the needs of rural Bolivia; the university began its programs in urban Santa Cruz and then extended its programs via distance education. To further develop its distance programs, UN developed a strategy of human resource development where key actors working in the community defined local actions to solve local problems. These key actors were teachers, because in the rural arena teachers truly are agents for social change. Since the teacher was one of the few in the community that read, the teacher became the rural lawyer, the auxiliary nurse, coach, and so forth. UN used the position of the teacher to support community members to engage in solving community problems and bringing together municipal, micro-regional and community levels. What followed was a program designed in 1993 called Training of Rural Schoolteachers as Community Development Agents Program.

With the inception of the educational reform law in 1994, UN submitted the program for approval as a bachelor's degree program. Twelve community development modules together with five pedagogical modules presented advances and innovations in educational theory and methodologies. By 1995, the Bolivian government approved the program and UN now offers a bachelor's degree in Educational Sciences with a concentration in Community Education. In 2000, UN received the Pioneers in Education award for this program, granted annually by the Bolivian Center for Educational Research and presented by the Minister of Education.

In 1996, authorities in the state of La Rioja, Argentina, began to offer the course to 300 employees, who in turn would train other schoolteachers. UN did the training for the trainer workshops. By 1998, 1000 facilitators of the educational reform in Ecuador from 21 provinces began training as instructors in the program, funded by the World Bank and the MOE. UN has since been invited to deliver this educational program in Haiti, Jamaica, Mexico, and China.

Because the university is also involved in supporting development and sustainability of the rural area, it has developed programs in five areas: a) Education, b) Democracy/

Municipal Strengthening and Just Governance, c) Public Health, d) NGO Strengthening, and e) Business/Private-Sector Strengthening.

Educational reform is moving from traditional learning to whole language and this affects literacy learning. Since phonics was taught without comprehension, and there was no tradition of reading in the family, UN became involved in evidence-based research. They are presently studying how whole language and phonics can be linked and be explained, both in Spanish and in bilingual languages, to uncertified teachers who have never learned pedagogy, but are expected to apply the new education reforms.

In terms of educational research, UN is now seriously pursuing the question "How do you teach Spanish as a Second Language to people who first need to understand letters and sounds in their own language?"

Organization

UN has been sustainable since its inception with tuition income and external funding for its extension activities. UN collaborates with organizations in the health, education, production, and social sectors at the local, regional, and national levels through joint programs and technical assistance. Funding has come from national and international donors, such as Fondo de Inversión Social, the World Bank, USAID, CIDA (Canada), JICA (Japan), GTZ (Germany), UNDP, UNICEF, CARE International, the Belgian Government, British Mission, IDB, and Plan International. The activities have been in the areas of public health, public administration, participatory rural appraisal, rural management, sustainable agriculture, literacy, gender training, training rural schoolteachers, and NGO strengthening.

Funded by the World Bank, the International Institute for Education and Development (IIED) invited UN to facilitate a community assessment of several rural areas in the provinces of Cochabamba, Chuquisaca, and Santa Cruz. The result of this initiative was a second collaboration in a poverty study in Bolivia. The report appears in the "World Development Report 2000-2001".

Pre-service Education

The wide diversity of UN's programs includes undergraduate degrees in Local Administration, Public Administration, and Governance. It also offers a diploma in Public Policy Formation. The university offers health programs in Hospital Administration and a master's degree program in Public Health Administration. Its programs are accredited internationally. USAID/PROCOSI had funded UN to provide research in regional health in the areas of maternal infant survival, tuberculosis, and chagas disease.

Bachelor's degrees offered at UN include: Administration, Commerce and Finance, Education, Communication Science for Development, Applied Computer Science, Agricultural Economics, Public Relations, and International Relations. The university

also has a long list of technical degree programs, diplomas for graduate study, specialization programs at the graduate level, and master's degrees.

UN was assigned two INSs under the education reform law of 1994, one in the Guarani area and another in Portachuelo. The Guarani area covers five different indigenous languages. Three hundred of the teachers are working on their bachelor's degrees and another 500 are working on graduate studies. The university, offering student teaching and supervision from university professors, manages most of these courses.

In-service Education

The university has been able to offer distance education to 30,000 in-service teachers on weekends via "telecenters". These teachers, often living considerable distances from Santa Cruz, come to these centers inside a municipality. With the use of a satellite dish, programs are beamed to these centers in video form. Out of the 314 municipalities, UN carries out its courses in 120.

The university begins by training 200 facilitators for a week. Then, it uses GILAT technology, from Israel, which gives teachers access to a phone line. Teachers are then able to see the video and talk to instructors to ask questions and obtain answers. The session is sometimes filmed and used locally within the schools. Adding a further medium, UN has signed a contract with ILCE in order to enable teachers to download courses offered by that institution via the Internet.

Facilitators come to the local sites to provide follow-up. Cooperative learning groups are formed to ensure practical application of what has been learned, both in the community and the classroom. This is followed by periodic reflection workshops. It is at these workshops that teachers exchange opinions based on their own experiences in a shared learning environment.

After teachers have passed through these steps, they are asked to design an educational project. These are then displayed at fairs run by the university, demonstrating the teachers' initiative. These fairs are open to everyone and usually generate a lot of interest. The success rate is high, with 70 percent implementing their projects using local resources.

Another feature to UN's in-service programs is its work with principals. The university works with the local school boards, called *juntas escolares*, where principals are taught project management, money management, and teamwork.

ICT and other Technologies and Resources

UN has affiliations with satellite and distance learning networks. It began receiving technical assistance over a five-year period (in 1988) from two universities in Canada and was able to strengthen its distance education division. Part of the training was teacher training and the development of materials.

The university's pioneering efforts were rewarded by becoming the first Internet service provider in the city of Santa Cruz. Today the university has an exclusive 256K connection via the National Telecommunications Company (ENTEL).

Since 1996, UN has developed in collaboration with IIED and the Institute for Development Studies (both from the United Kingdom) a virtual library on sustainable development. As part of the virtual library project, UN serves as the Latin American representative of the Resource Centers for Participatory Learning and Action. The university actively promotes connectivity with other virtual libraries and exchange among those in the field of socioeconomic development.

With this capability, UN distance learning programs are offered at the technical, undergraduate, and graduate levels, in isolated rural communities and in five state capitals of Bolivia, as well as nine countries in Latin America. Program delivery via the Internet is accessible around the world. It has also established inter-institutional agreements with distance learning organizations around the world, such as:

- ATEI, the largest network of television and Internet-based educational organizations in the world.
- ILCE, (including the delivery of a master's degree program in collaboration with ILCE in Communication and Educational Technologies.)
- GLOBATEL, a distance learning network of seven Latin American countries linked through GILAT technologies.
- Asociación Iberoamericana de Educación Superior a Distancia (AIESAD- España)
- Universidad Estatal a Distancia (Costa Rica)
- Universidad Católica de Val Paraiso (Chile)
- Universidad de Playa Ancha (Chile)
- Universidad Arturo Pratt (Chile)
- Fundación Centro Universitario de Bienestar Rural (Colombia)
- Fundación Quipus (Bolivia)

To further its design, implementation, and administration of information and communication networks, UN successfully negotiated an agreement with CISCO Systems International. This agreement named UN as the first local academy of the CISCO Academy Networking Program in Bolivia. It was established in the city of Santa Cruz and will have full coverage throughout the country with the Quipus Foundation in La Paz where the second CISCO Academy is located.

Development and training in the area of educational technologies has been ongoing. UN's new Educational Center for Information and Communication Technologies was opened in April 2001. It houses a computer-based training center, a multimedia production center, and the following services:

• Internet content for elementary and secondary schools in support of the educational reforms of the country in the MINGA DIGITAL project.

- A curriculum-based project that fosters understanding of the Bolivian educational reform and promotes student-to-student and school-to-school interaction through a Web-based virtual learning community.
- Free access to a virtual library service in Spanish.
- Radio NurNet to promote social values over the Internet.
- Development of interactive Web sites and portals for each academic program.
- Connectivity to two Latin American interactive satellite networks (ILCE and ATEI).
- Connectivity to a private network of remote learning classrooms linked via satellite through GLOBATEL International (Ecuador).
- Educational software development to support UN's distance learning division, established in 1993 (EDUCAD); multimedia CD production for core courses; course Web sites.

Population Served

UN serves both rural and urban communities, but concentrates on rural areas. Over the last ten years, the university has worked to develop distance learning programs in education for teacher training, training of pedagogical advisors, and noncertified teachers in the rural areas. In democracy training, the training of mayors and key public officials has strengthened municipalities and community-based organizations. It has also trained key personnel of nongovernmental organizations working in the areas of education, development, health, community participation, and the environment.

COUNTRY CAPACITY

The President of Bolivia and the Minister of Education are clearly the key political stakeholders for education in the country. President Quiroga is aware that, to confront the digital divide head-on, the country has to build a network of telecommunications to link Bolivians with the world. His support for development of educational technology is unquestionably strong.

Along with this strong commitment to excellence is the position the Minister of Education has taken regarding the country's education. When the CETT concept was explained to her and to MOE staff, all of them expressed interest, since they felt that improvement in reading instruction remained a pressing need. The MOE reform is a strong continuing effort, and activities of CETT could involve MOE staff in planning and designing so that CETT in Bolivia reinforces the current reform effort. One possibility would be to provide training to the *asesores pedagógicos*, since the MOE has made them the centerpiece of its teacher training efforts and they are responsible for in-class supervision and support in each *núcleo*. The MOE would particularly welcome support in the form of computers for the new resource centers; these could be used for CETT training, perhaps in an initial pilot effort.

When interviewees were asked about in-country financial resources capable of helping the sustainability of CETT there was a definitive denial of the potential support of the business sector. It was not apparent that the private sector would be interested in education until FUNDETIC was interviewed. FUNDETIC is a private organization of telecommunications companies throughout all of Bolivia. Its founding members expressed keen interest in CETT and explained an initiative that would eventually support community accessibility to the Internet. Because bridging the digital divide means connectivity and applications, FUNDETIC invited private business to meet the challenge. Soon, NGOs like CARE, Save the Children, and Fundación Quipus, and businesses such as ENTEL, Telesel, AES Microsoft Bolivia, Oracle (Open Systems), Cooperativas Telefónicas, CRE in Santa Cruz, and USAID, became the agents of the organization and created synergies among all members. With a US\$11 million donation from EDUCAR in Argentina, they opened an education portal.

The idea is to make the municipal libraries and resource centers media sites where computers are connected to the Internet. Under an agreement with the service provider ENTEL, the community would have connectivity to the Internet. FUNDETIC was looking for business enterprises that would offer funds to buy phone cards. These prepaid phone cards would be given to students and teachers so that they could have free access to the Internet. The potential of these sites as a training medium for the Center of Excellence was of interest to them. The sustainability of the program lies in the fact that community users, not teachers or students, would pay a discounted fee to use the service. In the long run, this would pay for the service.

Along with the private sector, there are many active NGOs in Bolivia that expressed interest and support in the concept of CETT. Key NGOs could be involved in a collaborative network that would participate in planning and design, and in activities run by CETT. The following are descriptions of NGOs interviewed:

As explained in prior sections of this report, Fe y Alegría is a Jesuit organization that has activities related to education in many Latin American countries. The organization concentrates on education for students in the poor urban or rural areas. One of its major activities is to run public schools in which the MOE pays the teachers at the standard rate. Data available indicate that Fe y Alegría has been more successful than the public schools in keeping students in school, and in reducing rates of repetition.

The organization started working in Bolivia in 1999 with an agreement between the church and the MOE, and is now the largest in South America with 380 schools. In 2000, Fe y Alegría Bolivia served 115,039 students in formal education programs. The Fe y Alegría director considers that reading is an extremely pressing need in Bolivia. It was the Bolivian branch of the organization that developed an excellent book for reading and writing, "Aprendizaje de la lectura y escritura en la propuesta educativa de Fe y Alegría, 1998".

Although Fe y Alegría is too busy running its own programs to be actively involved in CETT, the director said the organization would be delighted to collaborate in any way possible. Fe y Alegría is planning to develop a network of *teleaulas* around the country. These would be possible sites for delivery of trainings by the Andean CETT.

A branch of Fe y Alegría dedicated to alternative education runs the CEMSE. The center in downtown La Paz has provided services to a network of schools since 1986; there are now five replicas in the country. The centers provide a library and laboratories as well as attention to health to schools in the network. CEMSE is being used as a model by the MOE in a proposal to place similar resource centers in *núcleos* around the country. The CEMSE director expressed great interest in CETT, stating that there was an enormous need for improvement in the teaching of reading. It is hoped that the resource centers will be equipped with computers; these would be excellent sites for the provision of training offered by the Andean CETT.

Project Concern is an NGO whose headquarters are in San Diego, California, but works in El Salvador, Nicaragua, and Bolivia. Its strong suit has been training in health and coordinating the Title II Food for Education program. With funds from USDA's Global Food for Education Program, this NGO will be working with 25 private volunteer organizations in a pilot project. This program is an improvement on the original because it now has a focus on quality education. Project Concern will be training 1,500 teachers, including asesores pedagógicos, in participative classroom methods. Its focus is primarily on education for democracy and gender issues. Project Concern already has a working relationship with UN and would look to them to assist in teacher training offered by CETT. They would also like to document lessons learned in the field in order to disseminate information to major institutions.

The CBIAE has had a seven-year agreement with the MOE. It provides teacher training and a unique follow-up. As was mentioned earlier, this follow-up is considered a best practice. This institution would like to participate with CETT by doing research in the logical construction of knowledge of the Guarani, Aymara, and Quechua people.

World Band and IDB interviewees underlined the need to support reform efforts through CETT activities. IDB supports the education reform in two areas, curriculum reform and administrative systems. It assisted the MOE in the development of its evaluation program, SIMECAL. It has also backed the *asesores pedagógicos* with their salaries. IDB expects these educators to eventually do school-based training; they are presently training 1,800 people.

IDB suggested that one way of maximizing the CETT initiative was to choose a number of professors at the INS and do a training of trainers, creating specialists in reading. The sustainability of the program would come when these specialists provided courses to teachers interested in acquiring a certification in reading.

As mentioned earlier in this report, GTZ runs Pro-EIB in all of the Andean countries. Pro-EIB staff expressed great interest in CETT, stating that there is an enormous need for training in the teaching of reading. They also emphasized the difficulty that many teachers have with reading and pointed out that students entering the bilingual INS programs must first be taught to read in their own language, since such instruction was

never provided to them in school. They welcome any assistance that can be provided by the Andean CETT, expressed interest in collaboration, and suggested several topics for research (see section Agenda for Research). The structure and activities of Pro-EIB are remarkably similar to those proposed for CETT (see Teacher Training section); it would be worth consulting further with Pro-EIB personnel during the actual design process of the Andean CETT. The main Pro-EIB site is located in the Universidad Mayor de San Simón in Cochabamba. We were unable to make visits outside of La Paz, but this university was recommended to us by several interviewees as a good possibility for collaboration in a CETT network.

Since schools were closed during our visit, we did not have an opportunity to speak with teachers in Bolivia. However, the team spoke with representatives of the teachers' union, which has been critical of the education reform the MOE has put in place. The representative was supportive of the new teacher training, especially the use of technology to reach rural teachers. When asked if he or the union would back and support training done by CETT, he answered that the union would support CETT if the MOE was not running the courses or workshops.

Perceptions of the CETT Concept

MOE officials appear to be interested and supportive of the concept of CETT if they can be involved in its design. They want CETT to support reform efforts rather than to have it come in as a separate program with goals not linked to their own.

The U.S. Ambassador in Bolivia and the Director of USAID met with our team to express their view that CETT should not be placed in Bolivia. The Ambassador explained his concern as to why it should be placed elsewhere. USAID in Bolivia does not have an education officer.

We also met with the First Lady of Bolivia who is a former reading teacher from Texas. She expressed great interest in supporting CETT activities in Bolivia, irrespective of the CETT host country. She recommended that teachers be involved in the planning of CETT activities.

All of the university officials interviewed were very interested in being a part of CETT. There was a keen interest expressed to improve reading instruction; the general consensus was that it was greatly needed.

Organizations such as FUNDETIC were interested and willing to participate by providing services or helping make technology accessible.

Recommended Institutions

Bolivia is not being recommended as the host country for the Andean CETT. However, it does have some universities and nongovernmental organizations that are doing quality work in education. The team strongly recommends that the next step should be to do a

thorough teacher training needs assessment in order to determine the approach and design of the center. Once that has been achieved, a network should be established with various institutions that could provide areas of training, with UN as the Bolivian coordinator.

The assessment team did not feel that any of the Bolivian institutions had all of the characteristics desired for the institution that would host the Andean Center. However, several of the institutions visited would be excellent candidates for a network of collaborating institutions and could assist in the research efforts or the provision of teacher training. Although some site visits were not made due to the time constraints of the country visit, UN is being recommended as the coordinator and link with the other two Andean institutions. In addition, the universities that might form a collaborating network with UN within Bolivia are those that already have experience and have proven excellence in their specialty: USFA has an excellent student teaching program in its laboratory school, UDABOL has been evaluated as managing the best INS in Oruro, and UCB has sound training experience in the INS that it manages.

Among the NGOs, CEMSE's resource center is a valuable resource for CETT. The CBIAE is known for its research and could collaborate with research studies. The training strengths of Project Concern and Fe y Alegría could be useful for CETT.

Recommended Research Agenda:

Reading in general:

- Learn how teachers are presently teaching reading—relate that to whether or not they have received in-service training.
- Develop diagnostic assessments that can be used to assess how children in first and second grades are doing in reading.
- Investigate the most useful mix of phonemic awareness with comprehension when teaching early reading in Spanish.
- Do studies to investigate the best methods for teaching beginning reading.
- Do studies to investigate the best methods for teaching how to teach reading.
- Evaluate various approaches to distance learning (e.g., various modalities and various combinations of group work, tutorials used in the distance learning experience.)
- Assemble, catalog, and publish the best articles and studies on reading instruction already produced by the MOE and by others in Bolivia.
- Identify outstanding teachers of reading and the practices that make them successful.
- Identify best practices in the teaching of reading.

Bilingual/Intercultural reading education:

- Investigate the way in which the Andean worldview influences the way they approach learning in school, and learning to read in particular.
- Investigate the logic of the construction of knowledge by speakers of Aymara, Quechua, and Guarani.

- Investigate the way in which individuals from the oral cultures of the Andes learn to read and the best ways to teach them.
- Categorize for teachers the key differences between indigenous languages and Spanish, in order to understand how to teach in those languages as well as to assist in making the transition to Spanish.
- Investigate the best time and the best methods for making the transition from Spanish to the second language.

ECUADOR COUNTRY ASSESSMENT

General Context

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Ecuador has a population of 12,562,496 inhabitants. Fifty-five percent of the population is mestizo, 25 percent is indigenous, approximately ten percent is African-Ecuadorean, and the remaining percentage is Caucasian. Twenty-one indigenous languages are spoken in addition to Spanish, with Quechua and Shuar being the predominant indigenous languages. The population is divided about equally between that highland area and the coastal lowlands with migration moving toward the major cities. There has been a 55 percent increase of urban migration with indigenous migrant families from the highlands coming to the cities and creating indigenous enclaves around cities. The need for education that responds to the pluricultural and multilingual characteristics of these new urbanites is a priority for the country.

Black African-Ecuadoreans reside primarily along the northern border. This group suffers widespread poverty and pervasive discrimination, particularly with regard to education and economic opportunity. No special government efforts were found to address this population, however, UASB has been conducting an applied research project on ethno-education with Afro-Ecuadorean educators for the last year and a half. Ethno-education is an educational perspective designed to reaffirm a particular group's ethnicity and to restore value in its history.

It is estimated that 70 percent of Ecuadorean society lives in poverty. Ecuador's tumultuous economy in the last decade puts the four million poor citizens at increased risk, especially as the newly dollarized economy struggles to stabilize. The country remains one of the least developed countries in South America. The chart below contains information about fluctuations in the growth rate in the 1990s.

Table 1: Economic Growth Rate in Ecuador.

Year	1990	1991	1993	1994	1996	1998	1999
Growth Rate	+1	+2.8	-1	+2	-1	-1.5	-10

In 1999 and 2000, Ecuador came dangerously close to classification as a failed state. With a majority of the population excluded from basic economic and political processes, the country's extreme poverty has continued to put the poor at risk and has jeopardized Ecuador's internal instability. It is estimated that 70 percent of Ecuadorean society lives in poverty. Ecuador's economic struggle to stabilize itself after the initiation of a dollarized economy has made the country's four million poor even more vulnerable in the last decade.

Ecuador's high population growth rate of 2.3 percent and poor health conditions contribute to economic dislocations within the country. Migration of indigenous students, whose native language is not Spanish, to the larger cities is stressing the urban

school system. As the increasing population finds no outlet for employment, they seek employment elsewhere, as far north as the United States. Additionally, scores of qualified teachers have left the country, many settling in Colombia, Costa Rica or Mexico.

The faltering Ecuadorean economy has eroded the government's ability to support the social service sector of which education has been most negatively affected. A faltering economy combined with political instability translated quickly into instability throughout the education sector. With each new political campaign came promises from government candidates to reform the education system. Ecuador has had seven different ministers of education in the last ten years and as many educational reforms. All key MOE positions and posts are reassigned with each new election and reform. This lack of continuity has had a devastating impact on education, as implementation of numerous education reform efforts has been uneven.

In the last 20 years, there have been four major types of educational reforms in Ecuador. These reforms have been in the areas of education law, education financing, teacher training, and curriculum reform. The legal reforms have included new and revised education laws. A financial law that mandated that 30 percent of the national budget go to the education sector accompanied the revised laws. In practice, the education sector receives a little over 10 percent of the national budget.

Ecuador's recent reforms have been largely supported by high-visibility donor projects during the last 20 years. These projects were and continue to be financed by IDB and the World Bank. Donor funding has contributed to infrastructure development and refurbishment, increased access to secondary school, and curricular reforms.

Another important reform in the mid-1980s focused on a literacy project that successfully resulted in decreasing adult illiteracy from 12 to 10 percent. Another two reforms in this area have been the massive textbook development and publishing efforts. These efforts focused on reforming the primary-school curriculum, including supplying primary schools with revised materials. In the late 1990s, a new curricular reform took place, also focusing on the primary schools. Curricular reforms have been an evolving process in the country, never seeming to effectively take hold on a national scale. As stated above, political instability has not facilitated successful implementation of the well-designed and well-intentioned curricular reform plans of the MOE. New political campaigns encourage the use of curricular reform efforts as a candidate's political platform. Each new minister brings new curriculum changes, which inhibits the chances for a previous curricular reform to take hold.

The major spending in education for Ecuador has been on infrastructure and skills development for teachers and trainers. A negative impact of Ecuador's economic crisis is the diminishing government spending on education and other basic social services. Traditionally, social spending in the country has been channeled to education and health, but in the last few years direct funding to education has suffered a major reduction. According to the Ministry of Finances (IDB statistics), government investment in

education was 50 percent in 1996, 52 percent in 1997, 47 percent, 51 in 1998 percent, and plummeted to 24 percent in 1999. In 1996, \$52.00 per individual was spent and in 1999 only \$27.00 per individual was spent.

Democracy remains weak in Ecuador; however, a hopeful sign is that the general population is demanding a type of education that is values-based and strengthens democracy. Academic institutions, such as UASB, are pioneers in values-based education for democracy as a response to Ecuador's reputation as a country riddled by political instability and corruption. Respected Ecuadorean development practitioners lament the fact that development efforts cannot take hold in the present environment of corruption, where a serious lack of accountability exists throughout the public sector.

Perceptions of Educational Quality

The public school system in Ecuador suffers from a lack of accountability on many levels noted during the assessment team's field visit and interviews of stakeholders. The system cannot measure its success as reforms have been many, but inconsistent and lacking in follow-up. Achievement testing or benchmarking for students have not been systematized, and happen only sporadically. Teachers do not have incentives to better their skills as the government does not reward professional development through increased status or salary within the education system. (Teachers earn from about \$150 to \$200 a month, with the latter amount being the maximum pay scale according to the number of years of service.) The education management system at the government level is inconsistent and, due in part to continuing funding cuts, has not been able to follow through on reforms over the long term.

Teachers are poorly trained and unmotivated in many cases. Social recognition of teachers is alarmingly low. Dedicated professionals often do not see any attraction in becoming a teacher with a poor salary, insufficient or nonexistent teaching materials, and limited access to and incentives for training.

Informal comments regarding government support of schools for indigenous children, especially in areas that are heavily populated by migrant families, indicate that service to this group is substandard and not reliable. A number of Ecuadorean educators admitted that unequal opportunity is a hindrance to quality education for indigenous children.

The assessment team found definite support within the government for the CETT initiative. While the MOE welcomes the program wholeheartedly, it is imperative that CETT training be linked to the MOE so that recognition of the teachers' having received and implemented the training into classroom practices is present at the government level. If the MOE recognizes and rewards the value of the CETT training, teachers will be better able to seek the training and to put it into practice in their classrooms. After numerous donor-funded efforts in Ecuador that have felt imposed from the outside, the challenge is to adapt CETT training to the Ecuadorean educational, cultural, and linguistic environment so that communities undertake a program that is suitable and sound in their particular context.

Teacher Training and Reading Instruction

Overview

There was general agreement among educators and NGO personnel interviewed in Ecuador that teacher training for both secondary- and primary-school teachers needs improvement. There is renewed interest in improving the preparation of teachers in the region and the MOEs in each country are addressing teacher training reforms differently.

Overall, improved teacher training corresponds with current donor-assisted initiatives and reform strategies in Ecuador. In 1992, the formal teacher training institutions were transformed into *Institutos Pedagógicos*, which until 2001 had the responsibility for teacher preparation. At the beginning of 2002, a new reform affecting primary teacher training was taking hold. This reform shifted the principal responsibility for training primary-school teachers from Ecuador's traditional, three-year IPEDs to four-year universities. The reform is too new to assess, however, rectors and heads of IPEDs have felt the negative impact of the redistribution of government support and funding from the institutes to universities. Also, the physical facilities of the institutes are quickly falling into disrepair.

Ecuador, like many other South American countries, has been more concerned with providing greater access to education at the primary and secondary levels. Increased access to school in addition to curriculum reform have had more government spending and support while underestimating the need to tackle teacher training improvement. Countries have invested more in reforming school curricula, new textbooks, or building or renewing school facilities versus investing in teacher training. Increased access to education especially for the rural poor who migrate to urban centers requires teachers who are prepared to serve a culturally and linguistically diverse student population. This is only one of the areas of needed improvement. Government officials, policymakers, and donor agencies have begun to realize that for reform to be effective and sustainable a country must begin with a serious redesign of teacher preparation to define the new roles teachers will play.

Pre-service Training

At the primary-school level, Ecuadorean teachers are referred to as *professores/as*. This classification is largely based on the type of institution that grants the certificate. In the case of Ecuadorean primary teachers, *Institutos Pedagógicos* trained primary-school teachers until recently. *Institutos Pedagógicos Interculturales y Bilingües (IPIBs)* train professors in preparation for teaching in multicultural and bilingual classrooms.

These academic institutes are post-secondary centers specializing in teacher preparation at the preschool and primary-school level. In Ecuador, graduates from these *institutos* are not regarded as highly as are graduates from universities who come into a primary

classroom with a bachelor's degree. Teachers who have finished a university degree in Education are sometimes certified to teach in a secondary school, but are assigned to a multigrade primary school. Studying for preparation as a secondary-school teacher takes four years. Most of these graduates teach at secondary schools, but a significant number end up serving as primary-school teachers.

IPEDs are post-secondary institutions that grant a teaching certificate after three years of study, including a school practicum. All *institutos* discussed during the field visit were described as having *escuelas experimentales*, or laboratory learning schools where student teachers apply theory in primary-school classroom settings. The newer IPIBs do not all have a laboratory learning school of similar size attached to them; however, they are located close enough to community schools that provide teachers-in-training the opportunity to practice teach.

The program of study for primary-school teachers in training does include coursework on reading. However, the course title and description in a catalogue that was reviewed indicates that the approach to reading is theoretical rather than practical.

In-service Teacher Training

DINAMEP, within Ecuador's MOE, is the main provider of in-service training. However, as in other countries in the region, a number of NGOs, such as Fe y Alegría, provide excellent, school-based teacher training. In fact, NGOs in Ecuador provide teacher training that is effective in the long-term because these programs are typically classroom-based, implemented as close to a school community as possible, and the curriculum is typically based on school-community realities.

The most recent reform in education with implications for in-service teacher training at the primary-school level is IDB's US\$50 million Redes Amigas project, which is in its second year in 2002. Redes Amigas is a school-based management strategy that involves over 220 school networks throughout the country. School officials, classroom teachers, and parents form the Redes Amigas and are involved in total school management including hiring and dismissing teachers. A critical need for improvement at the school level is training for school supervisors so that they can provide technical assistance to classroom teachers during school visits.

Evidence of the specific aspects of reading instruction needed by practicing teachers was not gathered due to the very limited time devoted to discussing the topic while in the field. However, Ecuador's educational system is tending toward the establishment of more and more multigrade classrooms. Reading as a specialized area of study is not developed at IPEDs, nor at universities. There is a need for building a cadre of reading specialists, especially for the bilingual classroom. Additionally, classroom management, teaching and instructional materials for the multigrade classroom, and testing and assessment tools for reading improvement and performance are areas of need for improved teacher training.

The Andean CETT might be able to address the issues of (1) the lack of preparedness of student teachers, (2) lack of supervision of follow-up of new teachers who have completed teacher training, (3) lack of active, experiential training methods for teacher trainers, (4) lack of teaching strategies for the multicultural and multilingual classroom, (5) lack of training for school supervisors to provide technical assistance to classroom teachers, and (6) lack of simple tests and assessments for reading in the early grades.

Specific Training Needs

Disadvantaged Communities

In 1999, the poverty in Ecuador measured by the household consumption capacity was 1.6 percent greater than in 1995. The number of people who live in households whose consumption was lower than the poverty level increased from 34 percent in 1995 to 46 percent in 1998 and to 56 percent in 1999. Therefore, by 1999, six out of ten Ecuadoreans belonged to households that were deprived of basic necessities, including health, education, housing, and nutrition.

The most vulnerable groups live in remote Amazonian regions and, increasingly, in urban areas. Poverty has risen in cities in contrast to rural areas. In the cities, the percentage of people that live in poor households increased from 19 percent in 1995 to 42 percent in 1999. In the rural areas, the increase was relatively less. This indicates that if extreme poverty is considerably greater in the rural areas than in the cities, the number of persons that belong to this bracket doubled between 1995 and 1999, going from four to nine percent. Overall, the percentage of the population who lived in extreme poverty increased from 12 percent in 1995 to 21 percent in 1999.

Children who begin primary school speaking an indigenous language are considered to be those in most need. Although indigenous communities are represented by DINEIB at the government level, the changing politics of the country are such that bilingual education gets sporadic support depending on which political figure supports or creates obstacles to bilingual education. More and more, indigenous educators are advocating for trilingual education so that indigenous children can learn to speak Spanish, English, and their maternal tongue.

Bilingual/Intercultural Education

In 1988, the MOE established the first department of bilingual education. At that time, the country could claim 50 qualified indigenous educators. Today, the country can boast 2,500 indigenous, certified primary teachers who can serve Ecuador's 2,000 indigenous communities.

While 21 distinct indigenous languages are spoken in Ecuador, the director of DINEIB stated that his office develops materials for ten of the principal languages in the schools. DINEIB supports six IPIBs where primary-school teachers are trained to work in multicultural and multilingual classrooms. Of those institutes, five are publicly funded

and one is privately funded. These six institutes were developed in the last ten years and were established and developed with minimal financial support from the Ecuadorean government.

Bilingual education in Ecuador received it greatest support from GTZ in the late 1980s. Through the efforts of GTZ, DINEIB has bilingual materials in two of the major languages of the country, Quechua and Shuar. Although great progress has been made in the development of bilingual materials, officials of DINEIB have come to realize that the production of bilingual materials is highly expensive. They are not able to provide bilingual materials for all schools that desire the materials because of the cost and time involved in developing materials in the various indigenous languages. The texts are designed to be used side by side with Spanish texts in the classroom.

In Ecuador, indigenous parents are seriously involved in their children's education. There are 4,000 schools located in Quechua speaking areas and 1,900 of those schools are administered by the bilingual department. The department works diligently to improve education for indigenous children. In communities where a mayor is indigenous (and there are five indigenous mayors in Ecuador), bilingual schools receive appropriate support and funding.

Students with Special Needs

The field visit to Ecuador did not indicate that special effort for children with special needs who attend the public schools is provided. One private school that caters to children with physical handicaps is in Quito and serves a small neighborhood population. A discussion with a director of an NGO network did indicate that some NGOs in rural areas focus their outreach on children with physical disabilities and when attached to donor-assisted health projects, they are adequately staffed and supplied. IDB's Nuestras Niñas project considers physically handicapped children. Otherwise, special accommodations for special needs students do not appear to be provided by the government.

Evaluation

Evaluation, especially at the primary-school level, was identified as one of the greatest needs for improving Ecuador's education system. The recurrent political changes and the accompanying changes in ministry-level reassignments have made standardizing educational data a daunting task. Reliable education data outside of data provided by donor agencies was difficult to obtain while in the country.

A general lack of accountability in critical areas of the education system makes it difficult to have a precise understanding of the system's strengths and weaknesses. The point was made clear by an IDB social sector specialist responsible for drafting education sector policy papers and related studies. It was noted that accountability throughout the system, including reading readiness inventories, standardized testing at the primary level, or teacher performance assessments, is lacking.

At the early primary levels, there is no evidence of nationally administered pre-reading inventory testing for first graders or periodic reading achievement testing during the first three years of school.

School supervision is another area that is lacking starting with the routine functions of school supervisors. Improved training needs to be provided so that supervisors will be more than "desk and chair counters" when they visit schools. There is a need for school supervision that provides beginning classroom teachers with support and technical assistance. The need is especially great for teachers in hard to reach rural areas or in the Amazon region. Hands-on, practical school supervisors who lead through example are needed.

With the support of IDB funding, a large-scale project that is designed to standardize all MOE systems was initiated in 2001. The system would standardize databases to facilitate cross-departmental information sharing, tracking, monitoring, and evaluation of school changes.

A number of NGOs and private schools have informal tests that they administer as a way to assess student progress. Overall, there is a need for the development and effective application of reading achievement tests especially at the early primary grades.

Of particular interest and need are testing and assessment instruments for teachers who teach in multigrade classrooms. Thirty percent of the primary schools in Ecuador include grades 1 to 6, with only a single classroom teacher for all of those levels.

Resources

With regard to the equitable provision of school resources, Ecuador has a decentralization system in place that focuses on providing resource centers throughout the country. The general trend in Ecuador is the establishment of central points that are considered as resource centers where clusters of schools can access needed instructional materials, including the use of computer technology and Internet access. Resources including consumable materials are available for teachers wishing to make teaching and learning materials. The degree to which these resource centers are equally supplied throughout the country was not determined during the field visit, but the MOE Department of Planning explained that these centers were the government's answer to ensuring equal distribution of educational resources. None of these resource centers was visited during the field visit; however, the concept of locating educational resources at central points in order to facilitate accessibility to hard-to-reach areas is a positive sign.

Internet connectivity is very important even in the remote areas that border the Amazon jungle and in the northern border area where drug-related activity makes service to the areas precarious. UTPL (Universidad Técnica Particular de Loja) is a leader in the area of distance education, with over 120 centers of varying sizes established throughout the country. UTPL has real-time video conferencing and the technological capability to

provide video conferencing to rural areas where the university has modestly equipped sub-centers. For many years, UTPL in Riobamba has maintained a long-distance radio service, which is being effectively used today to reach remote rural areas.

Best Practices

The most tangible evidence that reading instruction in the primary grades is of importance in Ecuador was the convening of national educators by UNESCO in early 2002. Educators addressed teacher training and other inputs required for improved reading in the early grades. The conference proceedings have not been published or circulated, but there is recognition in the country that reading as a specialized area in primary education needs to be addressed.

In the area of intercultural and bilingual education, UASB is the institution that regularly is asked to collaborate with the MOE on school reforms. UASB is assisting the MOE in its efforts to revamp the education system including curriculum and teaching instruction. The MOE has charged UASB with advising the MOE on how to link bilingual and what is referred to as Hispanic education. Schools primarily attended by indigenous youngsters sometimes instill a sense of separatism and the MOE would like to minimize this practice. The MOE has given UASB the responsibility to establish in-country and regional conferences dealing with cultural and linguistic diversity to improve quality education and delivery for all children. UASB launched an applied research project with Black-African and non-Black-African Ecuadorean teachers in Esmeralda (in the northern border region) around issues of intercultural education for all.

In 2002, UASB will offer the first diploma in Intercultural Education. This diploma would be offered between the B.A. and the M.Ed. The diploma has been designed to improve elementary education in communities that are multilingual and multi-ethnic. The diploma will eventually be converted into an M.Ed. in Intercultural and Bilingual Education.

Redes Amigas, a rural autonomous school network program funded by IDB, supports the Ecuadorean government's decentralization efforts by granting autonomy approximately 20 percent of Ecuador's rural schools. Schools that are part of the Redes Amigas project, manage their own resources with greater involvement by parents and community members in school administration. Redes Amigas committees collaborate to improve teaching conditions in rural basic education in the primary and lower secondary grades by reviewing curriculum and other teaching materials used in local classrooms. The project started by establishing school networks in rural areas, then broadened the network by connecting the first phase networks to neighboring school networks. As of 2002, 20 percent of 120 school networks are located in the troublesome northern border area. The strategy is based on the institutional restructuring of the rural education system through the establishment of school networks. Administrative functions and responsibilities have been transferred to the local school level; parents, school officials, and interested community members can make incremental, controlled changes in the school management model for educational institutions in rural areas. Redes Amigas is also involved in the implementation of mechanisms for making educational administrators accountable to parents and the community.

INSTITUTIONAL PROFILES

Universidad Andina Simón Bolívar (UASB)

The following information serves to supplement the section on UASB found in Chapter II of the main assessment report.

Introduction

UASB is an autonomous and international academic institution dedicated to higher learning, research, and community service. UASB prides itself on being a university that responds to social needs.

The university's mission is to foster a spirit of integration in the Andean region from an academic, scientific, and cultural perspective. UASB promotes and spreads cultural values that reflect the national and regional traditions and ideals of Andean peoples. It is focused on its efforts to be of service to universities, institutions, governments, and other productive units in the Andean community.

UASB is funded by three sources: (1) contributions from the Ecuadorean government, (2) student fees, and (3) other sources of income, such as international cooperation, private contributions and the proceeds from university activities and services. As of 2001, UASB has 30 on-site faculty members and from 1997-2001, it had over 200 part-time or visiting professors.

Capacity for Research and Innovation

UASB offers a broad range of academic activities oriented to meet national interests as well as the interests and needs of the Andean community, Latin America, and other regions of the world. Study programs include Literature and the Fine Arts, Cultural Studies, Indigenous Law and the Administration of Indigenous Law, International Relations, Integration and Commerce, and Education, including values-based educational studies such as Democracy, Health and Traditional Medicine, Environmental Studies, Human Rights, and Intercultural and Indigenous Studies.

UASB's Director for Intercultural and International Studies is a North American professor who holds as U.S. doctorate in Bilingual Education. Dr. Catherine Walsh has developed UASB's first M.Ed. program in Intercultural and Bilingual Education. Under Dr. Walsh's direction and guidance, UASB is gaining a regional and international reputation for outstanding work in fostering positive relationships between Andean indigenous and non-indigenous groups, especially in the field of education.

Dr. Walsh has directed applied research for bilingual education settings in Bolivia and Peru and has developed the first offerings in Ethno-Education, e.g., education for African-Ecuadoreans, in the Andean region.

UASB is recognized for its productive working relationship with the region's many cultural and linguistic indigenous groups. It is one of the few academic institutions that has conducted applied research with African-Ecuadorean women in the Northern border area. This area constitutes Ecuador's greatest challenge to development projects since the area, which shares a border with Colombia, is influenced by drug wars and drug trafficking.

Organization

UASB has a Superior Council that serves its international governing body. The Ecuadorean Campus has a rector as its national representative. It has an Academic Committee where the faculty has full representation. A teaching coordinator and a research coordinator are the executive officers of the Academic Committee. For legal representation and counseling, UASB has an institutional attorney.

What strikes the visitor to the campus facilities are the obvious ways the university displays its appreciation of Andean history and Andean culture. UASB's support of and pride in the Andean indigenous culture is equally evident in the Quechua staff members who hold positions of high responsibility. UASB's walls and halls are decorated with refined Andean art work that represents the indigenous cultures and also make political statements about indigenous and other human rights.

The university's rector obtained his doctorate in history from Oxford University in England, and he has hired top faculty members including experts in multicultural and bilingual education from the United States.

The productive and positive working relationship that UASB enjoys with various branches of Ecuadorean government attests to its reputability and strong standing as a solid academic institution.

Pre-service Teacher Training

UASB offers courses and certification in area specializations, diplomas for specialized studies, master's degrees, and doctorates. International programs are offered at the doctorate, master's, and diploma levels. UASB signed an agreement with the MOE to reform the curriculum at the bachelor's level for the entire nation. The reform effort presently focuses on changes for grades 4, 5, and 6 so that the curriculum is related to what is currently taught in basic education grades 1 - 10.

The main work in pre-service training has always been at the secondary level, grades 8, 9, and 10. Because current reform efforts are shifting focus and funding away from IPEDs

to universities, UASB is involved in this effort because of its previous work at the secondary-school level.

UASB has an ongoing graduate program in educational and school-based management. School-based management which promotes the participation of school officials in school governance and parents in the selection of classroom teachers is currently funded by IDB. The school-management model is reflective of the decentralization efforts in Ecuador. A large percentage of school directors receiving school-based management training at UASB are school directors of secondary and primary schools, some of whom are school directors and MOE officials who hold key positions in the National Office of Bilingual and Intercultural Education.

In-service Teacher Training Programs

UASB offers two permanent open courses, which meet once a month for a year. One course is on innovative learning strategies and another course focuses on educational management for secondary- and primary-school officials. An innovative education module on multiculturalism is being offered in 2002.

ICT and other Resources or Technologies

UASB is headquartered in Sucre, Bolivia and its Quito, Ecuador office, while ample in facilities, is smaller than the site in Sucre. The UASB system is connected by Internet and all faculty and students have access to all standard Internet facilities. The university stresses face-to-face teaching in manageable-sized classrooms as a way to maintain learning quality and does use distance education technology when necessary.

Population Served

UASB has a local, regional, and international reach. Because UASB is the only academic institution represented at the CAN, its academic mission is regional in scope. It further enhances that scope by promoting international linkages that bring international faculty and students to the university to complement UASB's strong Ecuadorean faculty. In 1998-1999, the university had 22 invited foreign faculty members, approximately 40 percent of UASB's faculty, as compared to 36 full-time national professors.

UASB is able to accomplish what few other institutions have been able to do. UASB has facilitated meetings among groups that would ordinarily be considered opposing constituent groups. For instance, UASB has been asked on various occasions by the Ecuadorean government to convene meetings between MOE officials and indigenous mayors and educators in order to mediate agreement on matters involving decentralized services to indigenous groups. At the request of the government, UASB is helping to draft administrative law for indigenous education, a first in this country.

UASB has been conducting an applied research project in northern Ecuador where the minority population is Black African-Ecuadorean. This minority group is hampered by complications related to the drug wars and drug-trading. As a way to reach economically vulnerable groups, the university has developed workshops in ethno-education, an innovation for this region of the world. The ethno-education offerings were designed to facilitate a space for educators to develop a multicultural approach to education and to develop materials for application with similar African-Ecuadorean groups in other parts of Ecuador.

UASB also works with indigenous mayors who are trying to extend their reform processes to education in the municipalities, while taking into account issues of cultural and language diversity. UASB conducts workshops around diversity issues for politicians, educators, and NGO groups.

Universidad Técnica Particular de Loja (UTPL)

Introduction

Universidad Técnica Particular de Loja (UTPL) is a private institution that receives 10 percent of its funding from the government and the rest from private funding, the Catholic Church, and registration fees. It was founded by the Ecuadorean Marista Community in 1971, based on Christ's Humanistic Model in an attempt to capture the spirit of universities in the 12th and 13th centuries.

UTPL was founded in response to the need to provide university-level training for teachers in remote places. It has trained many high-school teachers: 5,781 with bachelor's degrees in different fields of expertise within education, and 356 with doctorate degrees. UTPL was the pioneer among Latin American universities with their distance education program beginning 25 years ago. In addition to education science, programs on computer science, environment, economy, agriculture, geology, architecture, and law are also offered to the student body - 15,000 distance education students, 3,000 in the open university modality, and 2,000 in different graduate programs. The university keeps abreast of the latest scientific developments via several ongoing research programs and involvement in regional technological transference.

Organization

UTPL is governed by a 14-member board where all the different components of the university are represented. The university develops its activity in five strategic areas: cutting-edge computer technology, distance education, economy for development, natural resources, and the humanities. UTPL is represented in 120 different locations, whether with physical or virtual campuses, all over the country and the world.

Teacher Training Programs

UTPL has an Educational Science department with bachelor's, master's, and doctorate degrees. In addition to Science, Geography, and History high-school teacher degrees, the university also has a school administration program and an intercultural and bilingual basic teachers program. The university has a cooperative agreement with the MOE's division for intercultural and bilingual division. Graduates from this program would be able to teach basic education at schools under bilingual and intercultural jurisdiction.

ICT and other Resources or Technologies

UTPL contracts the technical support of GLOBATEL to reach the most remote areas. GLOBATEL is a private for-profit technology partner. The university also makes its technical capabilities available to the private sector and other institutions. UTPL has gone further than the expected traditional academic role. Through the Red Educativa Virtual (Virtual Educational Network), the university uses all existing technical means to deliver the training via computer, Internet and satellite, with an interactive pedagogical approach.

UTPL has virtual classrooms with up to 300 people capacity, has an ISDN line for video conference and dedicated Internet connection in Quito, Guayaquil, and Cuenca. All the regional and associated centers are equipped with computers. The university has 24-hour accessibility to a satellite, using a 448 kbps downlink and a 160 kbps uplink, and a C frequency band (rank 4-6ghz). Satellite transmission uses QPSQ modulation.

Population Served

The population traditionally served by UTPL has been geographically dispersed, usually without access to tertiary teaching institutions. The student body is made up of students from upper middle class (61.76 percent) and lower middle class (18.51 percent) families. Students generally have previous work experience, are usually employed, and are economically independent. Most students pursue a graduate degree, hoping to improve their employment possibilities.

Pontificia Universidad Católica del Ecuador (PUCE)

Introduction

Pontificia Universidad Católica del Ecuador (PUCE) was established in 1946 with 54 students and a Law Department. It gradually incorporated other departments offering master's and doctoral programs in Economy, Theology, Civil Engineering and Architecture, among others. The university has four different campuses, in Esmeraldas, Ibarra, Ambato, and Manabi.

Capacity for Research and Innovation

PUCE has a well-established set of course and degree offerings, and demonstrates minimal interest in pursuing other areas.

Organization

PUCE is a private Jesuit university with a high profile in the country. It is an economically sound institution supported by the Catholic Church. It receives funding from the government and from student fees.

PUCE has some thirty different agreements with international universities such as Universidad del Pacífico in Peru and Universidad Javeriana in Bogotá, Colombia, and many of them in the United States like Georgetown University, where Ecuadorean students complete their training.

Pre-service Teacher Training Programs

PUCE also offers *licenciaturas* in Education with specializations, such as preschool, primary education, and a master's degree in learning disabilities and special education.

In-service Teacher Training Programs

The Department of Education offers four-year programs for current secondary-school teachers without a university degree.

ICT and other Resources or Technologies

PUCE has modern, well-equipped campuses, with technological capabilities in distance learning and teleconferencing along with a good library.

Population Served

Tuition fees are based on a preliminary analysis of the student's economic background. PUCE has traditionally attracted and welcomed indigenous populations and is a natural option for individuals of indigenous origin seeking a university education. Many prominent indigenous leaders have attended PUCE.